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Commandant's NOTE

MAJOR GENERAL KENNETH C. LEUER **Chief of Infantry**

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COMBAT TRAINING CENTERS
In Support of Training Excellence

The single most important daily activity of the United States Army is its preparation for war. To the infantryman, this means tough, realistic, and focused training.

To assist the commander in this critical effort, the Army has provided not only doctrinal guidance on training philosophy and principles but also the procedures required to implement this philosophy—the training process and the training management cycle. These are proven methods for identifying critical points in training and for focusing our efforts and limited training resources on them. Proper employment of the process will contribute to the accomplishment of the intended outcome—success in battle.

Thus, the training doctrine to be incorporated into FM 25-100, Training the Force, and supplemental manuals, along with school-developed ARTEP Mission Training Plans and drills, provide not only the philosophy and principles for training but also the "nuts and bolts" required to implement them.

The Army's philosophy of "training as a way of life" is nowhere better demonstrated than at the combat training centers (CTCs). Here, the philosophy and principles of training are inculcated throughout the planning, execution, and evaluation phases of the CTC training process. The newest of the training centers, the Joint Readiness Training Center (JRTC) at Fort Chaffee, Arkansas, focuses on light force operations. Based upon lessons learned in the development of the National Training Center (NTC), the JRTC serves as a useful example of the training center as an agent of change.

The FM 25-100 process is implemented at the JRTC through the interaction of the training unit chain of command, the training center, and the schools. The first step in this process is the establishment of the battle focus by the division commander, beginning with a thorough mission analysis. This analysis results in a stated mission.

Concurrently, the division and subordinate unit commanders develop a comprehensive task list based upon all possible missions and requirements. A filter test is then applied. The tasks that support the stated mission are classified as "mission and essential tasks." The resulting Mission and Essential Task List (METL) is the foundation for the unit's training efforts. Each echelon in the division prepares its own METL, and care is taken to insure that the METL of each echelon interfaces with that of the next higher echelon. The METL also serves as the point of departure for the interface of the training unit and the training center.

Approximately six months before a unit's deployment, the JRTC dispatches a group of representatives to the training unit's home station. The primary purpose of this visit is to determine the unit's training objectives. These will be used by the training center to develop the scenario the unit will see later at Fort Chaffee. Division, brigade, and battalion commanders all participate in this process. Then, from the battalion commander's METL, the collective tasks are selected that, in the view of all three commanders, are most important and can best be used for training at the JRTC. These, in turn, are assigned priorities and the most important are selected for use at the training center.

Specific conditions are applied to the selected tasks. Unit input is critical in this regard. Specifics, such as the opposing force (OPFOR) and the terrain and visibility conditions, are determined in the greatest detail possible. To ensure consistency, standards— if they are not already available in a Mission Training Plan (MTP)—are developed by the training center in coordination with the proponent schools. When put together, these tasks, conditions, and standards form the training objectives for a particular rotation.

The training objectives, in turn, drive the scenario. Therefore, every scenario at the JRTC is different even though basic operations and missions may be similar from one rotation to another.

The JRTC team takes the commander's training objectives and returns to home station to develop the general scenario and sequence of events. This product is subsequently staffed through various TRADOC agencies and schools approximately 90 days before the rotation. Division and brigade commanders are also given an opportunity to review the conceptual scenario to ensure its adequacy in meeting the stated training objectives.

Once the basic scenario has been approved, brigade orders, overlays, and fragmentary orders are produced to support it. Once again, these products are staffed for accuracy and completeness. When this process has been completed, the training plan for the rotation is prepared.

The execution phase of training at the CTCs, and especially at the JRTC, is an example of the principles of training at work. The mission is focused because of the extensive preparation effort by both the training center and the unit; accordingly, the execution phase provides the most realistic training available to a unit, short of war. All operations are executed in an environment that requires a joint and a combined arms team effort since the OPFOR has goals and counterobjectives that, if successfully accomplished, will defeat a Blue Force.

OPFOR units operating under similar, although sometimes different, constraints from those of the Blue units, force a training unit to demonstrate initiative and resourcefulness in order to win. Constructive credit is not given to either side. If ammunition does not arrive, weapons don't fire. If casualties are not evacuated, they "die" of wounds. Leaders are frequently casualties, which tests the resourcefulness and training of the junior leaders who are called upon to replace them. Subjective judgment is reduced to a minimum through the full-up use of MILES in all training.

The evaluation of training at the training center is continuous throughout the execution phase. Each mission or task is evaluated using training and evaluation outlines (TEOs) that list the task, the conditions under which it is to be performed, the standards that must be met for success, and the subtasks and standards that are component parts of the major task. The latter grouping indicates the strengths and weaknesses of the unit in overall task performance.

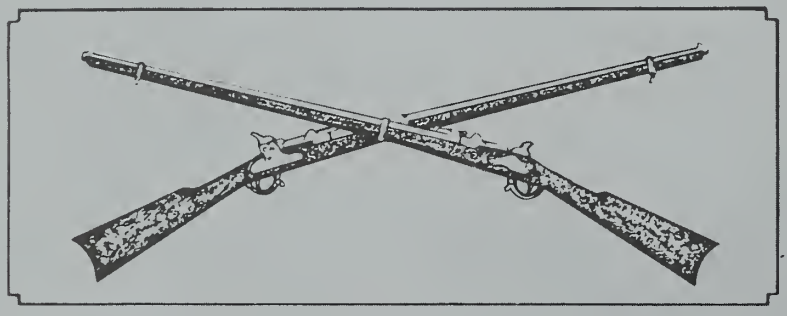
These doctrine-based TEOs provide the foundation for the after action review (AAR) at the conclusion of each mission. The AAR process gives the unit feedback on mission performance and is provided vertically to all echelons from squad and platoon through battalion task force by highly trained and motivated observer-controllers (OCs). Systems AARs, aimed at the effectiveness of each of the seven operating systems, are also provided to the task force, with the battalion task force maneuver AAR being the "capstone" review involving commanders and staff members.

The AAR process provides timely, accurate, and detailed feedback to the leader at each echelon as to which elements of his unit need training on which tasks, thereby providing him a focus for subsequent home station training. AAR feedback is generated through unprecedented instrumentation capabilities that include both audio and video dimensions.

AARs are documented in a take-home package that includes videotapes of battalion task force AARs, systems AARs, and selected company AARs. Additionally all documents relating to the specifics of unit performance (standards met or not met and battle damage assessment, for example) and a grade-out on training proficiency on each mission *(trained, needs practice, untrained)* are provided. This documentation gives the unit a snapshot of its training proficiency that cannot be duplicated at its home station in terms of depth and objectivity. Using the information provided in the take-home package, and also its own first-hand experience, the unit re-enters the training management cycle by reassessing its ability to execute the unit METL. From this assessment, the unit can determine new training requirements that will then drive the design and development of its future training programs and plans.

Providing his unit the best training possible is the obligation of every leader. The combat training centers serve as models for the fulfillment of this obligation. Training to standards can frequently be a painful process. It can in no way compare, however, to the agony that follows battlefield defeat or the lack of professionalism associated with the loss of lives due to inadequate preparation.

The combat training centers focus on performing wartime missions to high and objective standards under the most realistic conditions possible. They continue to set the example for planning, executing, and evaluating training throughout the Army.



INFANTRY LETTERS

SIMULATED AMMUNITION

Since my article "Ammunition: Dummy, Inert, and Simulated" appeared (INFANTRY, November-December 1987, pages 11-13), people have been asking about outfitting their entire divisions with this ammunition.

The most feasible way to do this and reduce the cost to divisions and installations is to obtain enough to outfit the largest unit that conducts external evaluations. With that amount on hand, there will be no need to outfit each soldier. Units can then request it and sign for it just as they do with MILES equipment.

The Training and Doctrine Command (TRADOC) is now looking at the feasibility of designating the Fort Benning Training Support Center (TSC) as proponent for small arms simulated ammunition, but approval has not been granted at this point.

If Fort Benning gets the go-ahead, the TSC will be able to provide these items to units in the field that want them. Fort Benning will have to be reimbursed, of course, by the divisions or installations obtaining them.

For further information, local TSCs should contact the Fort Benning TSC.

DEREK A.N. SORIANO
CPT, Infantry
Fort Benning, Georgia

DON'T SUBDIVIDE INFANTRY

I would like to second the comments made by Major Jack Mundstock in his letter (INFANTRY, September-October 1987, page 3). He offered some excellent reasons why the Infantry branch should *not* be subdivided into separate light and mechanized branches.

As a former "straight leg" light infantryman (in Vietnam and at Fort Hood, Texas) in the early 1970s, and more recently as an Armor officer working with mechanized infantry battalions in the 4th Infantry Division at Fort Carson, Colorado, I have gained valuable experience that leads me to the same conclusion.

Especially noteworthy was his observation that he suspected the transfer of skills from heavy to light infantry would be more difficult than the other way around. I most emphatically agree.

My tank company was often detached from its parent battalion and assigned to a mechanized infantry task force. I also frequently picked up a mechanized platoon when operating in a tank-heavy task force. In both instances I was frustrated by the mindset of the infantrymen with whom I worked. They were almost universally committed to remaining in their personnel carriers almost all of the time during field training. If they were skilled in the techniques of patrolling, conducting dismounted attacks, or clearing wooded areas by some means other than roaring through them in M113s, you could have fooled me—I rarely saw them perform these tasks.

During one movement to contact with a mechanized infantry-heavy task force, I ordered my infantry platoon leader to dismount a couple of squads and clear a woodline before I ordered the rest of the team to follow. At the after action review I was buttonholed by two of the infantry battalion's company commanders who accused me of mis-using my infantry. Both had elected to drive through the same woodline, suffering substantial losses to RPG teams, while my team went unscathed.

The lesson in this is that the M113 and the Bradley are not replacements for fundamental infantry skills. Light fighters know this—just ask any of them who have experienced the thrill of encountering a mechanized infantry company position late on a cold winter's night (the massacre that usually follows gives the light "grunts" something to talk about over a cold brew for months). It's a lesson I hope more mechanized infantrymen will take to heart.

DALE E. WILSON
CPT, Armor
Temple University
Philadelphia, Pennsylvania

We welcome letters from our readers and print as many of them as we can. Sometimes it takes a while before we find room. But keep writing on topics of interest to our readers, and we'll do our best to publish your letters, sooner or later. All letters are subject to editing to fit space and other editorial requirements.

THE COLDCREAM TRICK

INFANTRY's excellent article on the "lost" art of patrolling did a good job of suggesting that perhaps we have not always retained the lessons we have so expensively learned.

In the same vein, but on an entirely different subject, I was struck by the letter from Sergeant First Class W.P. Conboy (INFANTRY, September-October 1987, page 3) on the use of Vaseline to help shape combat boots. His advice was excellent, but I think it was a case of independent discovery.

Consider the following passage from a work of fiction (*Time Enough for Love,* by Robert A. Heinlein, 1973). The scene takes place in 1917; the United States has just declared war on Germany, and a grandfather— an old soldier—is advising his grandson:

Ted, do you know the coldcream trick? To use on your feet when you might have your shoes on for a week or more? . . .

If possible, have your feet clean and dry. Smear your feet all over and especially between your toes with cold cream. Or Vaseline, carbolated is best. Use lots, *a thick layer. Then put on socks—clean if possible, dirty if you must, but don't skip them—and put your boots on. When you first stand up, it feels as if you'd stepped into a barrel of soft soap. But your feet will thank you for it and you won't get jungle rot between your toes. Or not as much.*

Now Heinlein was born in 1907 and, before his appointment to Annapolis, was an infantryman in the Kansas National Guard. It seems reasonable to assume that he had picked this up from some old soldier in Kansas or Missouri or somewhere else along the line. But it was certainly not from personal experience in Vietnam, Korea, or World War II, because after his commissioning he served all of his time in the Navy.

I find this very interesting. Makes you wonder what else we may have forgotten during the years or may now be overlooking.

CHARLES F. COFFIN
MAJ, Infantry
Summitville, Indiana

MORE ON BOOTS

The thoughts expressed by Sergeant First Class W.P. Conboy (Retired) on the care of a soldier's feet (INFANTRY, September-October 1987, page 3) are very much on target. I too have done some walking and would like to expound on Sergeant Conboy's suggestions.

There is really no substitute for walking in wet boots to get them in form-fitting condition. But I have found that applying several generous coats of Mink Oil (allowing each to dry before the next coat) to the outside and *inside* of the boots over a period of several days is a more convenient method. At the end of this treatment, the boots can be comfortably walked into a good final fit,and the leather will last longer with better water repellency.

Reducing the friction that occurs inside the boot is the key to reducing blisters. I've discovered that, instead of applying Vaseline to the socks, two-inch wide, thin plastic, package sealing tape works well. The tape is very smooth and reduces friction considerably.

Carefully apply the tape to the inside of the boot at the back of the heel, the bottom of the heel, and the ball of the foot. The same package-sealing tape also reduces friction from the issue-type mesh insoles.

An infantryman's boots and rifle are his most important items of equipment. The former must be given as much attention as the latter. I don't know whether these suggestions will work for everyone, but they work for me.

CRAIG A. STEENSMA
SFC
Maryland Army National Guard
Wilmington, Delaware

MILITARY HISTORY SYMPOSIUM

The Department of History at the United States Air Force Academy will sponsor the Thirteenth Military History Symposium, 12-14 October 1988 on the topic "The Intelligence Revolution: A Historical Perspective."

For further information concerning the sessions and registration, call me at AUTOVON 259-3230; commercial (303) 472-3230, or write to me at the address shown below.

MARK CLODFELTER
Captain, USAF
USAF Academy
Colorado Springs, CO 80840-5701

QUICK-FIRE

The article "Point Man Training," by Captain Scott E. Hampton (INFANTRY, July-August 1987, pages 36-37) was very good.

The quick-fire qualification exercise brought to mind a technique revealed to me by a Lieutenant Commander Rhinehart, U.S. Navy SEAL, in Vietnam in 1968. He fixed a length of one-half-inch diameter stainless tube between his M16's front sight post and the carrying handle so as to create a "sighting plane." The hollow tubing still allowed him to use the front/rear alignment for an aimed shot, while the sighting plane gave him the same effect as looking down a shotgun barrel shooting skeet or trap. He claimed it was very effective in improving the "snap shooting" of a point man and demonstrated his own skill by "snap shooting" dinnerplate-sized plywood disks thrown into the air.

Try it. (The disk thrower should be behind a berm.)

CARROLL CHILDERS
LTC, Infantry
Virginia Army National Guard
Richmond, Virginia

UNCSF-JSA AWARDS

On 15 September 1987, soldiers of the United Nations Command Security Force-Joint Security Area (UNCSF-JSA) received not one but two Army Superior Unit Awards. No other unit in the Republic of Korea has received this award.

The first award was made by DA General Order Number 9 (dated 1 April 1987) to those soldiers who were assigned to the Joint Security Area during the period 18 September 1984 and 26 November 1984. The second award was made by DA General Order Number 30 (dated 1 July 1987) to those who were assigned during the period 15 May 1985 to 15 May 1986.

All of these soldiers may wear the award as a permanent one.

JAMES W. HICKS
CPT, Adjutant General
UNCSF-JSA
Republic of Korea

INFANTRY NEWS

FIELD MANUAL 23-1, Bradley Fighting Vehicle Gunnery, has been printed, and field distribution has begun. Distribution is being made by the contractor in accordance with the pinpoint distribution scheme established by the Army Publications Agency in Baltimore.

The manual incorporates a number of new or modified gunnery procedures and techniques, including range estimation, aiming rules, and boresighting.

The manual is complete with 10 chapters and 3 appendixes. Tables IX and X, however, have not been included but are expected to be distributed in Change 1, which will be published this summer. At that time, the tables will become Appendix D of the manual. Meanwhile, units should continue using the old Tables IX and X.

THE NATIONAL INFANTRY Museum recently completed a 100 percent inventory of its historical properties. With a collection of about 25,000 items, this was a monumental undertaking and required the help of all the Museum personnel.

Because the Museum has been favored with so many important donations of artifacts, the backlog of items to be catalogued and processed into the collection has become a major problem. While they have the potential of heightening the interest of the exhibits on display, several man-years will be required to catalogue them properly, in addition to the time that must be spent on conditioning, restoration, conservation, and preparation for display or storage. (A whole new technology for proper storage has developed, and it requires a great deal of time, care, materials, and expense.)

As a result, the Center of Military History has placed a moratorium of at least three years on additions to the Museum's collection. During that time, the Museum must direct its attention instead toward processing its present artifacts. The Museum now has to regretfully refuse some donations it would like to accept and is steering such offers to other military museums that are considered appropriate for the items being offered. The curatorial staff will now have more time to spend on changing the displays, and interested patrons can watch for new ones later in the year.

A new color brochure featuring the National Infantry Museum and its exhibits is being sponsored by the Columbus (Georgia) Convention and Visitors Bureau and will be available soon. Tourism officials have long recognized the Museum as a facility worthy of being included on schedules for tourists to the area and in publications that list and recommend attrac-

11th Airborne Division monument

tions for visitors and groups. Numerous photographs of displays will be included in the brochure.

The 11th Airborne Division monument that was mentioned in earlier reports is even more striking and impressive than had been imagined. Located across the street from the Museum, it is an imposing structure of concrete, granite, and bronze set in a grassy field with benches on either side of a walkway leading to the statue and going around its base. A large granite slab at the beginning of the walk is engraved with the 11th Airborne Division, paratrooper, and glider insignia.

The granite base on which the 6-foot, 10-inch bronze statue of the paratrooper rests is engraved on all four sides with a dedication statement, campaign credits and decorations, units, and the commanding generals of the division, which was active from November 1942 until July 1958. Completing the complex is a granite wall in eight sections, each engraved with the history of the division's service. It is a fitting memorial.

The National Infantry Museum Society, formed at Fort Benning a number of years ago to assist the Museum with financial and volunteer support, is open to anyone who is interested in joining. The cost is $2.00 for a one-year membership or $10.00 for a lifetime membership.

Additional information about the Museum and the Society is available from the Director, National Infantry Museum, Fort Benning, GA 31905-5273; AUTOVON 835-2958 or commercial (404) 545-2958.

FLIPPER, THE LATEST product in military mine-laying technology, is designed to augment the ground emplaced mine scattering system (GEMSS).

The new mine-layer works from the back of two-and-a-half-ton and larger trucks and tracked vehicles. Two soldiers can install the unit, which comes with its own carrying case, in less than ten minutes.

In operation, FLIPPER is a spinning tire encased in a metal frame. Once the unit is in place, the driver steers the vehicle through the area to be covered. When the tire attains a predetermined speed, the operator unpacks a sleeve of

M74 antipersonnel or M75 antiarmor mines and places them on the FLIPPER shelf, then manually feeds them, one at a time, into the launcher. The mine falls between the tire and a raceway, is spun, and is given an arming signal. The mines scatter at a rate of about one in ten seconds.

The device is mounted on a vehicle with a clamp assembly and is connected to the vehicle's electrical system by a NATO compatible power cord and connector. The mine dispenser and a dust cover complete the system, which is stored neatly in a packaging box. It can then be shipped or air dropped to a using unit. FLIPPER was designed and built by personnel at Picatinny Arsenal, New Jersey.

Although FLIPPER is not as fast as the GEMSS, it is a low-cost effective method of laying mines. It also has the potential for use by light infantry units that normally would not have an automated mine-laying capability. The first five are scheduled for testing by the Army in March 1989.

THE U.S. ARMY INFANTRY BOARD reports that the MILAN 2 is being tested to determine its merits as a supplementary interim medium antitank system (SIMATS). SIMATS is to supplement the fielded Dragon systems until the advanced antiarmor weapon system—medium (AAWS-M) is adopted. The test criteria for SIMATS are the same as those stated in the AAWS-M required operational capability document.

The U.S. Army Missile Command (MICOM) conducted technical testing of the MILAN 2 in the summer of 1986, and the Infantry School conducted a limited assessment of its operational portability at Redstone Arsenal, Alabama. This testing was followed by an initial operational test and evaluation (IOTE) conducted by the Infantry Board at Fort Benning, Georgia.

The MILAN 2 is a man-portable (81.6 pounds), medium-range (25-2,000 meters) antitank weapon composed of a firing post and a wire-guided, spin-stabilized missile. The firing post includes the launch and control unit mounted on a tripod. The control unit contains a periscope, which permits the gunner to maintain a low silhouette while firing and tracking the missile. Each missile is housed in a separate container that serves as the launch tube for the missile. The MILAN 2 also has a battery-powered, air bottle-cooled, thermal imaging night sight.

The Infantry Board conducted its IOTE (1 October through 20 November 1987) to assess the operational effectiveness and suitability of the MILAN 2 as a SIMATS. Nine antiarmor crews, each consisting of a gunner and an assistant gunner from the 2d Brigade, 10th Mountain Division, participated in the test. Both crew members were qualified Dragon gunners and both served as gunners during the test.

After receiving instruction on the MILAN system from a British new equipment training team, the gunners fired a total of 80 missiles against moving and stationary targets during daylight and darkness to determine the system's hit probability. At the conclusion of the hit probability firing program, additional missiles were fired to assess the MILAN 2's performance in regard to multiple engagements, coun-

termeasures, mission-oriented protective posture, and continuous operations. Three maintenance personnel in MOS 27E performed intermediate direct support and intermediate general support maintenance for the test systems.

Test data regarding transportability; portability; detectability; reliability, availability, and maintainability; human factors; and safety were collected throughout the testing. The test results will be used to support a Department of the Army decision on whether the system is suitable for use in high-priority units.

THE NEW SCOUT PLATOON Leader's Course, now being offered at the U.S. Army Armor School, will provide valuable training in scout platoon operations.

Although the initial fill of the classes will come primarily from the Armor Officer Basic Course classes, lieutenants from mechanized infantry battalions who have been selected to lead scout platoons may also attend on a temporary duty and return basis. They should attend just before taking over their platoons or as soon as possible thereafter.

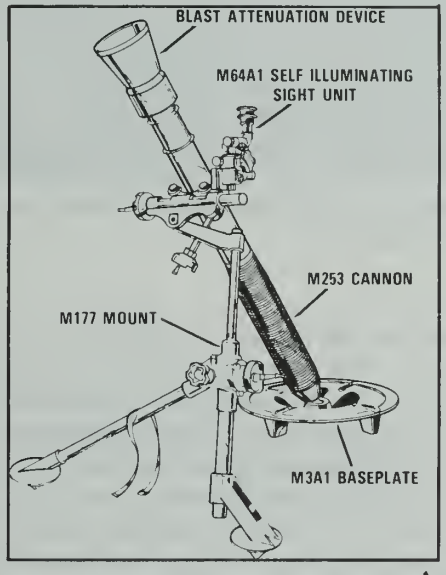
The three-week resident course is designed to prepare lieutenants for planning, directing, and employing a scout platoon. The program of instruction includes basic reconnaissance skills, threat operations, planning and using indirect fire support, and advanced reconnaissance and security operations.

The course is structured to allow a low student-to-instructor ratio with classes of 24 students or less. The training will include two weeks of intensified classroom instruction and a difficult one-week field training exercise (FTX) that will reinforce what has been taught. Four examinations will be required—two written exams in the classroom and two performance-oriented exams at the conclusion of the FTX.

The pilot class was taught 16 February to 7 March, and nine more classes are scheduled for 1988. Beginning dates for these classes are 28 March, 25 April, 23 May, 16 June, 1 August, 29 August, 26 September, 24 October, and 21 November.

TOE units that are interested in sending designated scout platoon leaders to this course should contact Major Bob Wilson or Captain Paul Jussel, Cavalry Branch, Armor/Cavalry Tactics Division, U.S. Army Armor School, AUTOVON 484-6783/6235.

THE NEW IMPROVED 81mm mortar system (I81) was recently completed with the type classification of two new cartridges—the M819 red phosphorus smoke round and the M853A1 illumination round.



This family of munitions, intended to replace the current M29A1 mortar system, also includes two high explosive cartridges and two practice rounds.

The I81mm mortar began as a co-development effort with the United Kingdom that led to an improvement in the British 81mm smooth-bore, muzzle-loaded mortar and its HE cartridge. The new mortar, later designated the M252 by the U.S. armed forces, has a stronger tube than the old one and also uses a blast attenuation device that diverts the muzzle blast and noise up and away from the gun crew.

The point detonating fuze on the British HE cartridge was replaced with the U.S. multi-option fuze. This fuze has a multiple-setting capability for either proximity (3-13 feet above the target), near surface burst (0-3 feet above the target), point detonating (function on impact), or delay (for penetration of bunkers, roofs, and the like) after impact.

The British cartridge's propelling charges were replaced with a charge system that is waterproof and more durable under severe handling and transportation conditions. The improved HE cartridge was designated the M821 by the U.S. armed forces.

A companion HE round, the M889, is identical except that it uses a less expensive point detonating fuze, the M935. This cartridge and fuze allow reversible selection between the point detonating and delay modes.

The current stockpile of 81mm ammunition can be used with the new system, and the improved ammunition can also be used with the old system at reduced ranges. All the fire control data for this improved family of ammunition will be incorporated into the recently fielded mortar ballistic computer (MBC).

In addition, a lightweight self-illuminating sight unit and self-illuminating aiming post lights make the night placement of the mortar easier. The new system also upgrades the current NATO-standard M3 series baseplate to the stronger M3A1 baseplate.

The I81mm mortar system, through the combined efforts of the United Kingdom and the United States, will strengthen the U.S. Army's airborne, air assault and light infantry battalions and the Marine Corps' fighting forces as well.

INFANTRY HOTLINE

To get answers to Infantry-related questions or to pass on information of an immediate nature, call AUTOVON 835-7693, commercial 404/545-7693.

For lengthy questions or comments, send in writing to Commandant, U.S. Army Infantry School, ATTN: ATSH-ES, Fort Benning, GA 31905.

PROFESSIONAL FORUM

Thinking Light

CAPTAIN THOMAS E. FISH

A great deal has been written about the Army's light infantry divisions, but what is being "light" all about? What makes the real difference?

On the surface, it seems that the main distinguishing characteristic is the division's austere MTOE, which allows it to deploy in a relatively few aircraft sorties. But while it does have less equipment, the MTOE is not the main factor. Looking closer, for example, the tactics the division employs also differ from those of other infantry units.

But doctrine and tactics are not the bone deep characteristics that set light fighters apart; nor is it the range of missions they are expected to be prepared to execute. None of these things seem to be the quintessential element that makes the light infantryman a different kind of soldier. Yet, anyone who has witnessed the birth of the modern light infantry can tell you that the light fighter *is* fundamentally different.

I spent almost two years as a rifle platoon leader in the first of these divisions, arriving in May 1984 just as the old 7th Division was beginning its transformation into the 7th Infantry Division (Light). Back then, a lieutenant could seldom go to the field without a senior officer tagging along and taking notes. These officers handed down doctrine and tactics to the small unit leaders and watched to see what worked and what didn't. Often the "light leaders" made up their own tactics and techniques. It was not uncommon to hear junior officers and NCOs in lively discussions with higher ranking officers about what light infantry units should do and how they should do it.

SUBSTANCE

I have since mulled over those debates, looked at the lessons learned during many field problems, and talked with many officers, NCOs, and privates. The insight I have gained in the process is this: Despite the austere MTOE and the shiny new doctrine and techniques, and despite all the "whiz bang" attention surrounding the word "light," what makes the light infantry different extends much deeper—into the very heart of the individual soldier and his leader. Certainly the MTOE is the structure and the doctrine is the form, but structure and form are nothing without substance, and the substance is the dynamic of "thinking light."

Thinking light is a process that begins with reevaluating most of what an individual previously learned about tactics, especially if the new light fighter is a second lieutenant fresh out of IOBC. Basic soldier skills and basic patrolling techniques remain extremely valuable, but the rest can be set aside. The "light" thinker must undergo a transformation in his spatial orientation, in his leadership orientation, and in his physical and spiritual orientation. Some people will change more than others, but everybody will change to some degree.

The first step in the process is for the light fighter to discard all linear perceptions of the battlefield. He must forget such things as friendly lines and enemy lines and FEBAs. No matter where he may find himself, the conventional battlefield will have little application to him. He must learn to think instead in terms of expanding and contracting circles. Except for the local security afforded by mutually supporting fires covering 360 degrees around him, there will be no secure areas. This includes the trains areas of brigades and divisions, because there are no rear areas.

The second step in "thinking light" is for him to acquire a new feeling about formations. Although the basic building block is still the fire team, formation sizes are smaller. A platoon, the basic formation in "regular" infantry, often works as independent squads. Company columns are rare. Formations of battalion size or larger come together for the attack and then dis-

perse. Whether the mission calls for searching out elusive guerrillas or slipping through heavily fortified positions, smaller formations are the norm, because they provide for broader coverage of terrain as well as better protection from the lethality of modern weapons. (This increased decentralization, however, brings with it more command and control problems, and these can be overcome only through strong leadership at squad level and a clear understanding of the commander's intent.)

In both low- and mid-intensity conflicts, even defensive formations are tailored to be *offensive* in nature. The light fighter's art is to use smaller groups to confuse and weaken the enemy, hitting him from several different directions when he least expects it, much like a spider laying a web for unsuspecting insects. Through the dynamic of "thinking light," less is turned into more as the light fighter becomes that spider—light, silent, and deadly.

The light infantryman's orientation toward terrain is also different. Where the mechanized infantry soldier looks at the ground from a broad perspective, and with a more linear orientation, the light fighter learns to appreciate the nooks and crannies. Each piece of turf is considered in developing operational plans and the ground itself, with its ridges and folds, becomes a close ally. "Thinking light" allows the light fighter to use the earth in unexpected ways and teaches him to master the most difficult terrain. His home is in the unpleasant places—the rocks, swamps, and jungles. He learns to turn adversity into advantage.

Because he is given less but is expected to do more, the light leader must develop a different leadership orientation. This new orientation is reflected in the way he trains himself and his soldiers, in the way he gives commands and controls the battle, and in the way he solves problems. The various enemies he is likely to be deployed against, and the environments he is likely to be deployed in, calls for a training program that stresses the fundamentals of marksmanship, fieldcraft, land navigation, basic tactics, and physical fitness. He avoids rigid drills and elaborate techniques that may reduce his flexibility. In addition, he and his soldiers must become competent forward observers, combat engineers, and medics, because these are tasks they will often have to perform for themselves on the battlefield.

What makes the light infantry different extends into the very heart of the individual soldier and his leader.

Decentralization is the key to many light infantry operations. Well trained subordinate leaders who understand their commander's intent and who are capable of independent action are essential. Therefore, the light platoon leader must spend a great deal of time with his squad leaders to make sure that they understand the way he thinks and that he understands them as well. The squad leader, more than the platoon leader, is the leadership focus in light infantry operations. The platoon leader must be careful to give clear mission-type orders and then to allow his squad leaders the flexibility they need. The same is true for the relationship between the company commander and his platoon leaders.

Leaders make decisions, solve problems, and set the example. "Thinking light" teaches the light leader to become a master of the indirect approach, to accomplish the mission while at the same time making the most efficient use of his resources. Time, food, water, ammunition, and soldiers will be too scarce to be thrown at an objective or a problem in the time-honored straight-on fashion. The light infantry soldier or leader cannot afford to be tied to routine solutions, because functional rigidity would be his undoing in combat. He must develop a broader field of vision and learn to use whatever is available.

Finally, at the heart of "thinking light" is the physical and spiritual dimension in which body, mind, and spirit are honed so that each soldier himself becomes a weapon—the

embodiment of soldier power. This is by far the most difficult element of the dynamic to achieve, but there are several ways in which it takes root.

It begins with a group of men who know each other, who will stay together, and who will draw strength from each other. (COHORT is an essential part of a light infantry force.) Then these men are put into a strenuous physical fitness program, including foot marches and combatives. Next, they are presented a series of challenges to be met both individually and in small groups—mountain climbing, rappelling, river rafting, obstacle and orientation courses, long range patrols, and survival situations.

Once their bodies are hard and their confidence in themselves and each other is high, their leader begins to train their minds. This requires a working education program that includes the Basic Skills Education Program (BSEP), General Test (GT) score improvements, college courses, and leader-taught classes on military and non-military subjects. The smarter the soldier gets, the more he becomes a weapon, and a weapon that can wield itself.

The final element in the dynamic of thinking light, and in the process of building a light infantry force, is spiritual battleproofing. In this the battalion chaplain plays a key role. A soldier who is spiritually in tune is less likely to become a stress casualty. The U.S. fighting man has had a long history of valor and dedication, but the light infantryman of today must develop the same hardened body, keen mind, and resolute spirit found in the consummate martial artist.

The light infantry divisions are not "elite" units. Their size and the variety of the missions they will be called on to do prohibit them that status. But they are different, and what makes them different is not just the MTOE or the tenets and tactics developed for their use. The difference is that, faced with the requirement to do more with less, the soldier in a light division learns to *think* "light." His special orientation and the way he looks at the battlefield are different. The increased use of decentralization and the scarcity of resources cause him to lead and to solve problems differently. And most importantly, the light infantryman himself becomes a weapon through disciplining his body, his mind, and his spirit. In essence he becomes like a spider—light, silent, and deadly.

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The "Jet"

A Streamlined Movement Formation

CAPTAIN NOYES B. LIVINGSTON III

Mounted and dismounted movement for many units seems to be more difficult than it should be. Just as we use certain drills to allow crews and units to act in the absence of orders, we can also use simple unit formations to facilitate movement.

Some leaders are opposed to prescribed formations, because they view them as inflexible and dogmatic. Actually, though, a well rehearsed and familiar movement formation allows leaders to be more aware of the situation and more flexible in their response to it, because they are not wrapped up in the mechanics of moving.

There is no good substitute for the proven staggered column for tactical road marches, but there is an elegant formation that is suitable for all cross country traveling, traveling overwatch, and bounding overwatch techniques. It is called the "Jet" formation because seen from above it looks like a high-speed jet aircraft (Figure 1). The Jet formation is nothing more than the traveling overwatch formation shown in Figure 4-19, FM 7-7, but with the left rear APC moved back abreast of the one on the right.

The Jet formation allows a unit to change from the traveling formation to traveling overwatch to bounding overwatch without altering the basic formation, just the distance between the elements. The Jet provides good observation and fire to the front, flanks, and rear and, unlike wingman pairs or sections, it also makes contact with the smallest element—the point or lead element.

The formation also allows the point element to concentrate on land navigation, route selection, and forward security. This permits the control element to

follow the lead element safely and to concern itself with navigation and the overall situation. The other two elements key off of the control element, following its example at all times, and focus on flank and rear security.

The Jet formation can be used for M113s, tanks, and Bradleys, and it is equally effective for dismounted elements as shown in Figure 2. It can be used by a platoon or company team with their squads or platoons moving in platoon Jets. For example, a company Jet in bounding overwatch would have its lead platoon Jet moving in internal bounding overwatch with the two wing platoon Jets moving in internal traveling overwatch as shown in Figure 3.

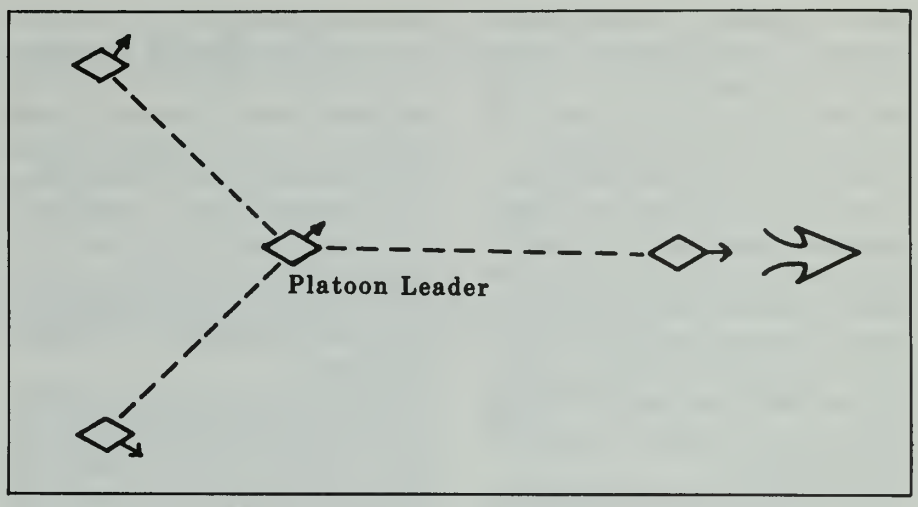

Figure 1. Mounted platoon Jet formation in traveling overwatch.

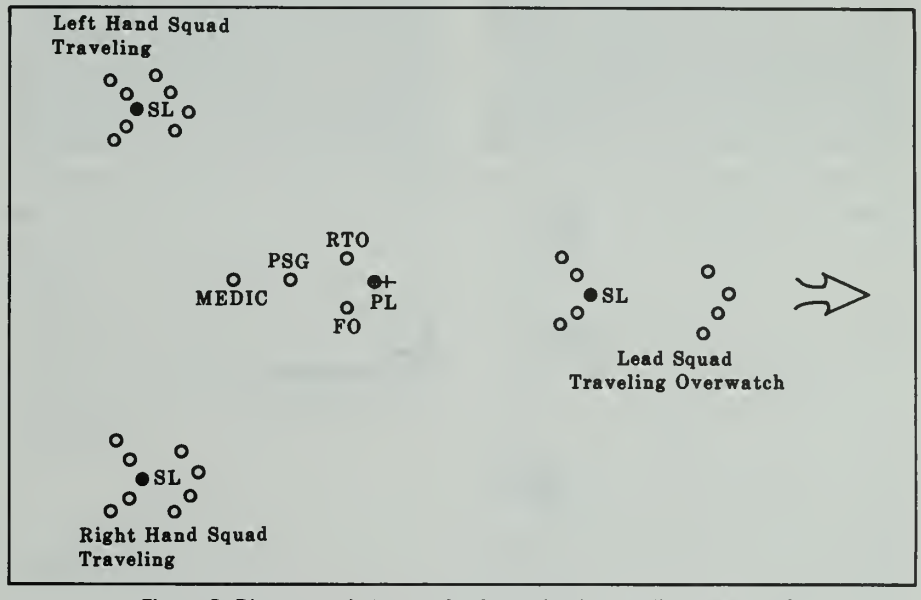

Figure 2. Dismounted platoon Jet formation in traveling overwatch.

TASK FORCE

A battalion task force wedge, diamond, or double-column formation can be made up of company team Jets employing the movement technique that is appropriate for their position in the task force formation (Figure 4). Regardless of the echelon using the Jet, every subordinate element in it continues its own Jet formation and all around security coverage.

The distances between the three elements in the wing of the Jet formation depend on the terrain and conditions, as does the distance between the wing and the point element. There are occasions, in close terrain, where the Jet at any level may have to be compressed into a column or rocket formation.

In a mechanized company team Jet, the tank platoon normally leads in its own platoon Jet. If the ground is unsuitable for armor, this Jet moves in the wing on the most exposed flank, or right behind the team commander if a column of platoon Jets is necessary.

Regardless of who leads, during bounding overwatch the point element moves to a good overwatch position and remains there. The three wing elements move up near that position at the same time, guiding on the controlling element. The point element then moves out on order in another successive bound while the wing elements over-

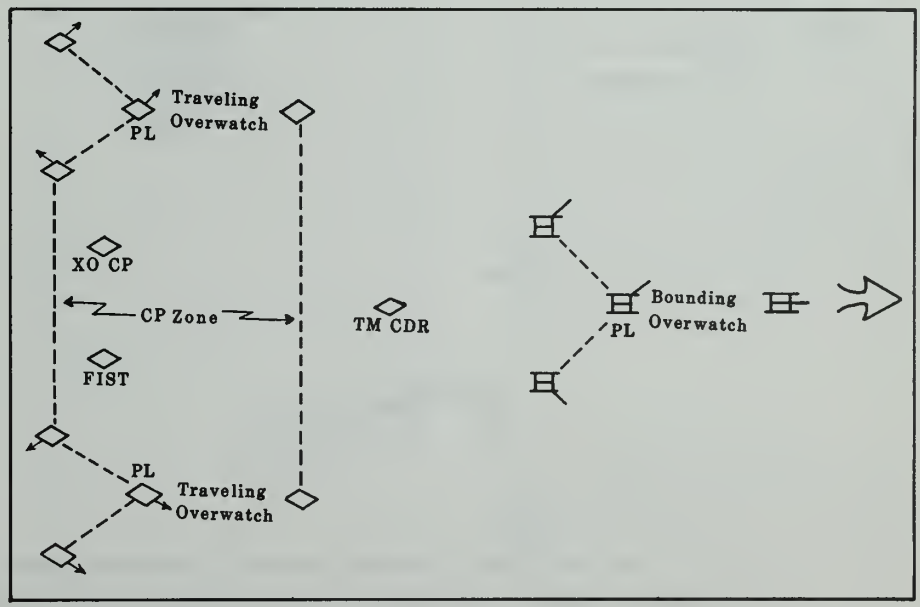

Figure 3. Mounted company team Jet formation in bounding overwatch.

watch. Depending on the terrain or the fatigue of the lead elements, the lead can be exchanged at any overwatch position by having a wing element continue on in an alternate bound.

It is important to remember that the overwatching elements must be able to engage an enemy force that might fire on the bounding point element. This means that the bounding element can bound only about one-third to one-half of the effective range of the overwatching elements' most important weapon. Direct fires must range beyond the bound position.

Open areas can be crossed quickly in traveling overwatch, or by bounds, but each vehicle should perform zigzag terrain driving while doing so. Although zigzagging will take a little longer, an enemy antitank guided missile gunner will find it harder to hold a steady sight picture and smoothly track the vehicle. This maneuver should not be a violent post-launch anti-Sagger drill; the zigzag legs should be fairly long and the turns moderate to avoid mechanical damage and crew injury. To an ATGM gunner looking through a sight at 2,000 meters, short zigzag legs do not present much relative change. If the vehicles are fired on, they must return fire to suppress the gunner and dodge right or left to avoid the missile.

Arm and hand signals are the most effective way of controlling the Jet, so long as each vehicle or element has dedicated front and rear lookouts, both doubling as local security. When an element leader signals an action, the lookouts must alert their own leader and repeat the arm and hand signal. If an element is mounted, the track commander should also repeat the signal to relay it from his more conspicuous position. Repeating a signal also lets the leader know that his sub-elements have received it and that they will act upon it.

The alternate signal for the wedge shown in Figure 4-9 of FM 7-7, which is both hands held together over the head so the arms form a delta wing shape, can be used for the Jet formation. The wedge formation itself can continue to be signaled by holding both hands up at a 45-degree angle, which is the other alternate wedge signal, described in the text on page 4-8 of FM 7-7, and one that most units are already accustomed to using. By using arm and hand signals, a platoon or company will find it easy to go on line or into echelon from the Jet, or into a wedge in the case of a mounted platoon.

The radio must not be used as the primary means of controlling the Jet.

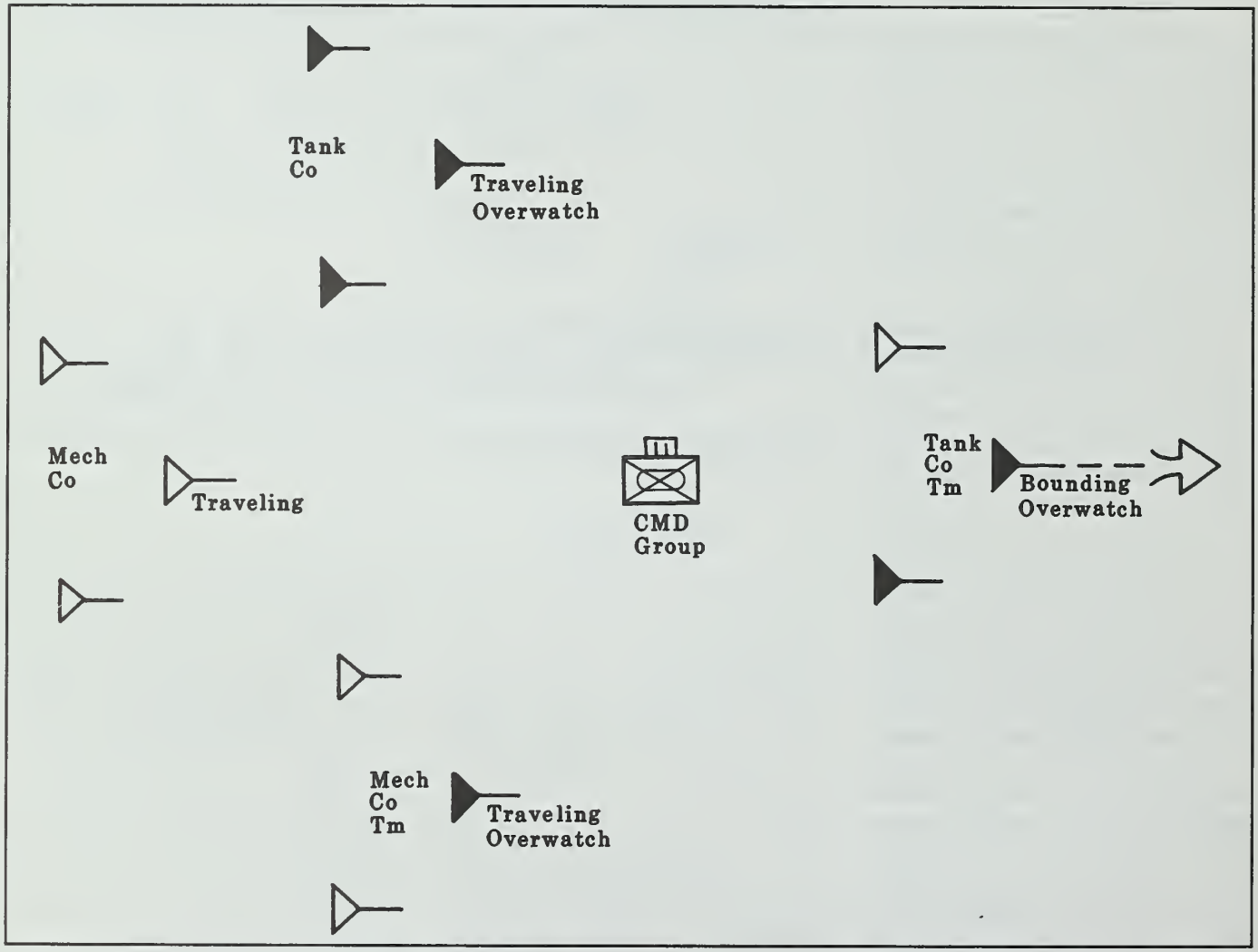

Figure 4. Balanced mechanized infantry battalion task force diamond attack formation employing company team Jet formations.

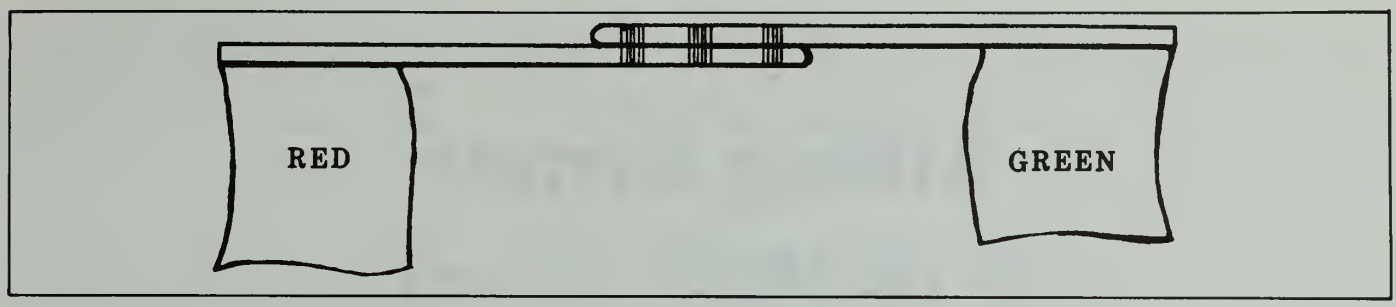

Figure 5. Signal flags taped together to make an extended length STOP/GO drill signal device.

A well trained unit should be able to move from an assembly area to contact with the enemy without making an unrequired radio transmission. If the platoon leader needs to talk to the lead element, he can walk or drive to it. It is helpful to develop an arm and hand signal that tells one vehicle to pull within talking distance of another facing in the same direction. A side-by-side chopping motion of both hands over the head can accomplish this, and can also get a mounted platoon halted in a tight line formation for a quick on-the-spot correction during training.

Element leaders and track commanders can wear white or light colored athletic sweat bands on their wrists to help make their arm and hand signals more visible during dusty road marches or tactical movement. Arm and hand signals should be dramatic and emphatic; they must be forceful enough to compel a response. Limp wrists and vague gestures don't work.

Flag signals are also helpful during mounted movement if they are kept simple. Signals that require two or three flags are difficult to perform, are subject to misunderstandings, and are unsafe in a moving vehicle. A red and green single signal flag stop-and-go drill, modified from the "move-out" and "enemy in sight" visual signals in Figure D-2 in FM 7-7, is effective in controlling Jet movement. Because it is awkward handling two separate flags, the staffs of the red and green flags can be taped together as shown in Figure 5, so that only one signal flag device has to be kept track of and held onto. If red, or stop, is the signal the green flag is gripped and the flag staff is almost twice as long this way.

If the lead vehicle in a platoon overwatch Jet waves a red flag it means that it is set, but the platoon leader and wing vehicles should not move until the position is secure and a green flag is displayed. On arriving at the overwatch position, the platoon leader can use an arm and hand signal or a red flag to hold up the movement of the lead vehicle if he needs to talk to its crew. If not, the platoon leader points with his arm or the green flag in the direction of movement, and the lead vehicle displaces automatically to the next good overwatch position along that axis. Because bounding overwatch is controlled by the terrain and by a unit's standing operating procedures, not much needs to be said in each position if a unit is well trained and the Jet formation has become a skilled routine to its soldiers.

PROBLEM

Prescribed formations have their problems, too, because leaders are often tempted to take the lead. Figure 4-17 in FM 7-7 shows a platoon commander leading in mounted traveling overwatch, but this is a poor practice even if enemy contact is not likely. First, the platoon is not practicing the skills it will soon need in traveling overwatch or bounding overwatch. Second, when he leads, the platoon leader tends to move too fast, focuses his attention to the front, loses sight of what his platoon is doing, and leads the platoon into trouble. In the first vehicle the platoon leader is more easily pinned down and usually ends up fighting for his life with few weapons when he should be reporting, calling in indirect fire, and leading the rest of his platoon to defeat the enemy. In short, the platoon leader should always be in the second vehicle back.

Equally important, the habits learned in peacetime will be practiced in combat. For every platoon leader who leads his mounted platoon, there is a squad leader and a squad of soldiers who are not learning their jobs. If a platoon leader has difficulty controlling a platoon from one vehicle to the rear, he will later be overwhelmed trying to command a company team with arm and hand signals from *five* vehicles back when he becomes a company commander.

The Jet formation is not an inflexible formation designed to replace the established movement techniques of traveling, traveling overwatch, or bounding overwatch. It is an all-purpose movement formation that allows the moving element to adapt smoothly and quickly to the terrain and the situation.

The Jet is a logical adaptation of a doctrinal traveling overwatch technique that is applicable to all mounted and dismounted tactical movement at patrol, platoon, company, and battalion levels. This formation minimizes the need to change into other formations and allows the specialization of sub-element functions while promoting fluid, secure movement. Like its supersonic high performance namesake, the Jet formation is streamlined but functional.

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Killing Armor

In the Middle Ground

MAJOR RICHARD D. McCREIGHT

The U.S. Army Infantry fights the antiarmor battle at three ranges. Short range targets are handled by light antiarmor weapons (LAWs) such as the AT-4; the middle ground is handled by medium antiarmor weapons (MAWs) such as the Dragon; and long range targets are engaged by heavy antiarmor weapons (HAWs), primarily TOWs.

The ongoing debate over antiarmor weapon development, training, and doctrine has rekindled many issues from the past, not the least of which is how light infantry units can best fight armor in the middle ground with MAWs. (For purposes of this article the middle ground is the 200-700 meter range of the battlefield.)

Before discussing how light infantrymen can best fight armor in the middle ground, some general assumptions are warranted to set the terms of reference for my argument.

- The Army's future MAW, the advanced antiarmor weapon system—medium (AAWS-M), is at least 10 years away. Proposals for the future AAWS-M require that it be no heavier than 45 pounds and manportable.
- In the same 10 years the defense dollar will continue to shrink, making the value of expensive antiarmor systems for *all* infantry forces and *all* theaters questionable.
- Our light infantry's most probable armored threat in the next several decades will be in the lesser developed countries, in cities as well as rural battlefields. Therefore, most probable armored targets for our light infantrymen will be on the lower end of the "high tech" threat scale. Most will be non-tank type armor *without* reactive armor.
- During that time, our light infantrymen will still want manportable antiarmor weapons with little or no reliance on vehicles to sustain their loads. Their primary focus will remain on the premise that if you don't carry your killing tools on yourself you're *not truly* light.
- Regardless of theater or type of mission, light infantry will still want the capability (regardless of whether it takes three weapons or one) to kill armor, bust defense works (rural or city), and kill soldiers with an antipersonnel round.
- The terminal training objective for MAW crews will continue to be to kill armor and to kill enemy soldiers with a minimum loss of its own crews. To ensure that the terminal training objective can be met, the infantry will continue to train to defeat armor from the flanks and rear, avoiding the frontal armor shot. In general, any MAW can defeat any armor from the flank or rear.

If these assumptions are generally true, what tools does the light infantryman have with which to accomplish the terminal training objective? The current primary tool for the middle ground is the Dragon. The 75th Ranger Regiment, the Berlin Brigade, and many Engineer, Cavalry, and security units retain the M67 90mm recoilless rifle. (Most of these units retain the M67 by default, not by choice.) For fighting the middle ground in the future, the Dragon is not the preferred MAW for light infantry units since it lacks versatility for busting defense works, is least useful in cities, requires prolonged gunner exposure and is too delicate. The Dragon also requires a "designated" gunner training methodology that is materially different from the primary purpose for which the Army purchased the weapon. While we initially believed any soldier could hit a tank at 1,000 meters, subsequent years of experience proved this wasn't possible.

The fundamental issue for killing armor and enemy soldiers with a MAW is how much we can get out of such a weapon. Consistently, U.S. and foreign technologies have settled on the 80mm to 100mm bore for MAWs. The trade-off for warhead size is range versus weight. Bigger warheads can't go as far as small projectiles on the same amount of propellant. Neither can one man carry a large MAW in addition to his own basic load. It generally takes two or three men to carry a MAW weighing 45 to 60 pounds. In the research and development community, all contractor proposals for future dual-purpose light to medium antiarmor and anti-bunker weapons use a recoilless technology, and round diameters remain in the vicinity of 84mm to 115mm. Laws of physics and acceptable soldier load limits consistently keep medium systems within this "caliber."

Until there is a remarkable technological breakthrough that drastically alters the laws of science, therefore, a medium antiarmor weapon of an aver-

age 95mm bore that relies on technology (instead of a gunner) to get a hit on distant armor cannot satisfy the terminal training objective with only one soldier. The ability of an infantryman to handle a 45-pound weapon expertly—alone—and consistently achieve target hits cannot be sustained in training today or in the next several decades.

Exceptional marksmen (of any kind) are so because they shoot a lot. We cannot rely on simulators and video apparatus to provide the same quality of trained marksmen and crews that live firing provides. Exceptional marksmen become exceptional only when resources keep up with their requirements. MAWs that are too expensive to shoot frequently and that require expensive simulators and training devices are in the long term more expensive than a simple, rugged, reliable MAW with inexpensive ammunition, of which a lot can be provided.

A review of how the Army fights short range armor targets would be beneficial, in order to put the MAW issue in proper context.

The Army, in developing a set of common tasks in which soldiers should be proficient, included the task of engaging armor. Light antiarmor weapons (LAWs) are the correct choice for this because common task individual soldier targets are expected to be at short range. The common task soldier (not including infantrymen, tankers, TOW gunners, and attack helicopter gunners) is not expected to be an integral part of antiarmor fire planning. Rather, the common task soldier will engage armor more in local self-defense than as an offensive initiative. LAWs are inexpensive and easy to train on. Short range antiarmor fires (normally far less than 200 meters), especially in the rear battle area, can be relatively efficient when delivered by simple, light, antiarmor weapons.

Engaging armor targets at ranges from 200 to 700 meters, however, requires more proficiency than a common task soldier can be expected to have.

We must accept the fact that one man, infrequently trained, cannot do as well as dedicated crewmen who haul the several components and fight the weapon as a team. We don't treat our machineguns, tanks, or helicopters that way. (The addition of an antiarmor section to the light infantry company would be an excellent way to fix this problem.)

Accordingly, MAW killing tasks need to be undertaken either by a system that relies on the weapon for success and that depends less on the gunner and crew, or by one that relies on the gunner and crew for success and depends less on the technology of the weapon. I propose that the best way to fight targets in the 200-to-700-meter range band is the latter.

Which weapon best fits the fighting philosophy outlined above? The "best" MAW should be versatile enough to meet the needs of light infantrymen in the three desired capabilities. If an inexpensive, rugged, low training cost solution is available to meet those needs, encumbering the light force with two or three different weapons to achieve multiple round (rocket or missile) MAW capability is an expensive and tactically unsound venture. Multisystem solutions cost too much and require the same "designated" gunner approach as the Dragon to retain any proficiency with no appreciable gain in its ability to kill armor. Shrinking resources demand a critical look at simple, inexpensive answers to a simple problem. A crew-served MAW with multiple round, rocket or missile choice, and abundant service and subcaliber ammunition is a reasonable solution.

One solution would be to improve

our own M67 recoilless rifle. The technology exists for making a 25-pound rifle out of titanium, for improving the breech-locking mechanisms, and for lightening the monopod and other components. With the commitment of funds for research and development, state-of-the-art ammunition to fill the three desired capabilities is within easy reach. That ammunition would be substantively better than any that is available through any foreign market. This solution, in the broad sense, is infinitely more affordable than any of the high-technology solutions that have been offered.

The Army must take a critical look at how we fight the middle ground. We must return to a fighting philosophy that a medium antiarmor weapon must be simple, durable, and inexpensive; must be crew-served; and must have an abundant supply of ammunition in order to kill armor with exceptional marksmen shooting exceptionally accurate fires.

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Officer Evaluation

How Well Does the System Work?

CAPTAIN THOMAS M. JORDAN

General John A Wickham, when he was Chief of Staff of the Army, said, "Our effectiveness depends on continuing to improve the professional competence, imagination, and integrity of Army leaders from the most senior to the most junior."

To help promote that improvement, the Army uses the Officer Evaluation System as its primary tool for identifying the officers who are best qualified for advancement and assignment to positions of increased responsibility. But does this system actually work? And does it contribute to the improvement of professional competence within the officer corps? The results of a recent survey I conducted indicate that the system may be out of kilter.

I administered my survey over a period of time to company grade officers with approximately four years of commissioned service who were attending Infantry Officers Advanced Course classes at the Infantry School. Each of these officers was asked to complete the survey on the basis of his last job assignment before coming to the course, and 108 responded.

Admittedly, this is a limited study with data from a small group; nevertheless, the results may be an indication of a more general problem with the system.

One rather sobering result from the data was an apparent lack of communication between the rated officer and his raters. DA Pamphlet 623-105 clearly states that the officer evaluation support form (DA Form 67-8-1) "should be first used during the rating period as a work sheet to discuss the rated officer's duty description and major performance objectives." Despite this guidance, 37 percent of the officers in the survey said they had not agreed with their raters in advance on what their performance objectives would be. Fifty-nine percent of them said they had not even discussed their performance objectives with their *senior* raters.

Equally disturbing is the fact that 40 percent of the officers said they were unaware of the standards of performance and the expectations of their raters, and 68 percent said they did not discuss standards or expectations with their senior raters.

Fifty-four percent of the officers indicated they had received performance counseling from their raters throughout the rating period, but only 27 percent indicated that their senior raters had provided any performance counseling during the rating period.

Seventy-two percent said they discussed their performance with their raters at the end of the rating period, while 28 percent said they did not. Only 49 percent said they discussed their performance with their senior raters at the end.

Sixty-two percent said they did not believe the efficiency report would affect their future performance while 38 percent felt their performance would improve as a result of the report.

All of these responses indicate that, in the eyes of these officers at least, the officer evaluation system is not working very well.

One of the problems seems to be the way the support form is being neglected. According to DA Pamphlet 623-105, this form is designed to "increase planning and relate performance to mission through joint understanding between the rater and rated officer and [to] encourage performance

counseling [through] continuous communication." But it is clear that among this particular group of officers, this interaction seldom occurred.

What this means is that these officers, when assigned to new positions, in many cases, received little guidance on what was expected of them or what their jobs consisted of in the eyes of their raters or senior raters. Neither did many raters and rated officers develop similar ideas in advance about what constituted good or bad performance.

Feedback is another problem. The current officer evaluation system encourages both raters and senior raters to provide this feedback to their subordinates. Yet 46 percent of the officers in this survey said they did not receive any such feedback from their raters, and an alarming 73 percent said they did not receive any from their senior raters.

A positive aspect is that 72 percent of the officers said their raters did discuss their performance with them at the *end* of the rating period. In view of the earlier lack of agreement on performance objectives, however, and the absence of clearly communicated performance standards, this eventual discussion may have been more of a report card than a fair appraisal. For the 28 percent who did not discuss their performance ratings with their supervisors at all, this was clearly the case.

A major concern is that most of the officers did not believe the rating would improve their future performance or otherwise affect it. This indicates that little communication and coaching took place. It also indicates that the OER was essentially a report card and that it was not used within the intended structure to promote the development of the individual officer.

Thus, it seems that many of these officers were not really participants in the evaluation system. Some seem to have weaved their way through the system and received a report card on their mission accomplishment at the last stop. They may have realized then what had been expected of them all along and what their raters and senior raters considered good and bad performance.

Still others seem to have gone through the entire process only to receive a report card based on arbitrary standards that were never communicated to them, not even at the end. The system certainly was short-circuited in these cases, and the victim was the subordinate.

Preparing performance appraisals is not an easy task or a popular one. Many officers are uncomfortable making such judgments and even more uncomfortable communicating those judgments to their subordinates. Another problem is that some supervisors tend to assume their subordinates know what they are supposed to do and are surprised when they do not.

Although more extensive research would have to be conducted to confirm that there is a problem, certain recommendations can be made from this survey.

First, since a senior rater has a tremendous effect on an officer's career, an effort must be made either to see that senior raters fulfill their monitoring role or to eliminate their input entirely. Further study would be necessary to confirm one option or the other, but it appears that some senior raters do little except pass judgment, and one can only imagine the performance criteria they use.

Second, more stringent measures need to be applied to see that the support form is used the way the regulation prescribes, perhaps in the form of suspenses.

In addition, the system must ensure that officers who become raters understand their duties and obligations to their subordinates. Every officer should therefore be required to attend instruction on the purpose and methodology of the officer evaluation system. Then each officer should be required to demonstrate that he can follow the correct procedure.

Hopefully, additional training and closer monitoring will help alleviate these problems, and the system can be made to work the way it was designed to work.

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World War II History

German Military Studies

CAPTAIN HAROLD E. RAUGH, JR.

Mao Tse-Tung wisely noted that "We should carefully study the lessons which were learned in past wars at the cost of blood and which have been bequeathed to us...."

One of our greatest legacies from World War II, but one that is now virtually unknown to soldiers and scholars alike, is the 24-volume *World War II*

German Military Studies and the 15-volume *War in Asia and the Pacific.* (Both series were published by the Garland Publishing Company, New York, 1979 and 1980, respectively.) Written primarily by former German and Japanese military and naval officers, these studies (along with a multitude of unpublished studies in each area) provide a unique inside view of the organization, strategy, and tactics of the armed forces of our former adversaries. Many of these studies are worthwhile to infantrymen as examples of successful, and unsuccessful, small unit operations conducted by an experienced enemy.

NO PLANS

The story of the development of the German studies, in particular, is an interesting one, and it emphasizes the need for an effective and well-organized military history program. When the war in Europe ended on 8 May 1945, a number of Allied nations and their staffs and agencies scrambled to seize and exploit German documents, primarily for their intelligence value and as potential evidence in the forthcoming war crimes trials. The U.S. Army failed to appreciate, however, the wealth of knowledge and insight it had at its disposal in the minds and memories of the hundreds of high-ranking former *Wehrmacht* officers being held as prisoners of war. Indeed, the war-weary Army had no plans for a major historical project involving large numbers of former enemy commanders and senior staff officers.

In July 1945 the European Theater historian, Colonel S.L.A. Marshall, sent one of his staff members to the Luxemburg prisoner of war camp that held the top German leaders, saying, "Get what you can get in a week or ten days and then come back." That officer, Major Kenneth W. Hechler, worked tirelessly and almost single-handedly and by the end of July returned to Paris with 16 reports. These reports contained answers to a multitude of insightful questions that had been posed to such leaders as *Reichsmarschall* Hermann Goering, Field Marshals Wilhelm Keitel and Albert Kesselring, Generals Alfred Jodl and Walter Warlimont, and Admiral Karl Doenitz.

As Major Hechler interviewed General Warlimont, who had served as Deputy Chief of Operations in the German High Command, he realized immediately that an unprecedented amount and quality of historical information was available on the innermost machinations of Hitler's Third Reich. Major Hechler was immeasurably impressed and inspired by his initial interview with Warlimont and later wrote "My eyes widened as I saw for the first time what had taken place 'on the other side of the hill.' Each response opened a new vista: Hitler had felt we would land in Normandy....The other Germans thought it would be closer to Pas de Calais....," and so on with similar revelations.

The value of the reports compiled by Major Hechler led to the formal organization the following year of the Operational History (German) Section within the European Theater Historical Division. Former German Army Chief of Staff General Franz Halder was selected as the program's German director, and the project centered on carefully selected groups of German prisoners of war. From the inception of the program until its termination in 1961, more than 2,500 manuscripts totaling over 200,000 pages were prepared.

Each of the German manuscripts, based upon the general topic and time of writing, has been classified into one of the following categories:

ETHINT-Series. ETHINT is a contraction of European Theater Historical Interrogations, and the 81 manuscripts in this series (all of which have been translated into English) make up the first American historical interviews with German officers after the end of the war. Most of the manuscripts pertain to campaigns and other strategic topics. They include "Normandy Invasion," by Field Marshal Wilhelm Keitel, written 23 July 1945 (ETHINT-49) and "Comments on Patton and the U.S. Third Army (September 1944)," by *Generalmajor* Friedrich von Mellenthin, written 16 May 1946 (ETHINT-65).

A-Series. This series is made up of all the translated German manuscripts found in the first complete inventory made in mid-1946. These manuscripts were numbered in inverse order from A-1000 to A-855. All the authors were in a prisoner of war status, and their manuscripts include operations down to and including regimental level. Examples of A-series manuscripts are the following:

- "History of the Attempt on Hitler's Life (July 20, 1944)," by *Generalmajor* Rudolf Freiherr von Gersdorff, 1946. Personal experiences of one of the conspirators (A-855).
- "Strength, Organization, Armament, and Equipment of Troops in Battle," by General of Panzers (Lieutenant General) Hasso-Eccard von Manteuffel, 1946 (A-872).
- "The Truth about Katyn," by *Generalmajor* Rudolf Freiherr von Gersdorff (the general staff officer charged with the direction of interrogation and exhumation), 1946 (A-917).

B-Series. This series is made up of all the manuscripts still untranslated when they were inventoried in mid-1946, and of other manuscripts added until July 1948. This is the largest category—850 manuscripts on the greatest diversity of topics, including infantry, armor, airborne, and mountain division operations, logistical problems, Rommel, coast artillery, combat experiences in Russia, and the campaigns in Italy, the Balkans, Norway, Poland, and elsewhere. Many topics, however, are concerned with the Western Front after the Normandy landings.

C-Series. This series was begun in July 1948, largely as a continuation of the B- and D-series. The C-series consists of 102 studies (many of them subdivided into multiple sections), including a wide variety of topics, unit operations, and battle and campaigns.

D-Series. This category is made up of 431 documents, 317 of which were written at Garmisch between December 1946 and July 1947, with the last study being written in 1951. Most of these studies are about German operations in

the Mediterranean and the Soviet Union, but other topics include munitions production, logistics, horse diseases, river crossings, and artillery in swamps and ice, among many others.

P-Series. The studies in this series, started in 1948, will undoubtedly be of the greatest interest to infantrymen. Many of them were written at the request of the U.S. Army and other Federal Government agencies at the time of the growing East-West tensions that manifested themselves in the Berlin Blockade and airlift, the Truman Doctrine, and the U.S. involvement in the Korean War. The United States wanted detailed information, especially for intelligence and training purposes, on German military experiences on the Eastern Front against the Soviet Union. Topics include, for example, "A Study of Soviet PW Camps" and "Russian Interrogation Methods and Propaganda." Many of the studies cover small unit tactics that emphasize the role of the infantry and the other combat arms. It is worth noting that most of the Department of the Army Pamphlets in the "German Report Series," published in the early 1950s, were derived from P-series studies. (See "A Forgotten War," by Captain Michael A. Phipps, INFANTRY, November-December 1984, pages 38-40.)

T-Series. These studies, written between 1947 and 1949, are generally about broad topics (most about the Eastern Front) and strategic operations and large campaigns, such as "The Battle of Moscow, 1941-1942." Many of them are multi-volumed and were written by a committee of officers, one of whom was selected to be the topic leader to supervise the project and edit the results.

In all, 213 of the German reports, representing six percent of all the manuscripts (or about one-sixth if one considers only the studies that have been translated into English) are included in the 24-volume *World War II German Military Studies.* They represent a cross-section of all the studies that were written. These and the rest of the manuscripts as well can also be found in the National Archives. (The basic contents of the volumes in this series are shown in the accompanying box.)

PART I. INTRODUCTION AND GUIDE (Vol. 1).
- Editor's Introduction.
- Table of Contents to all volumes.
- Studies on the evolution and organization of the German Military History Program.
- German Military Historiography Before 1945.
- Complete listing of all manuscripts in the German Military Studies.

PART II. ETHINT-SERIES (Vols. 2 and 3).
- Record of 80 interrogations (35 in Vol. 2, 45 in Vol. 3) conducted in the summer and fall of 1945.

PART III. COMMAND STRUCTURE (Vols. 4, 5, and 6) (T-Series Studies).
- The German High Command During World War II (Vols. 4 and 5, and continued in Vol. 6).
- Special Command Problems and Questions—four studies (Vol. 6).

PART IV. THE OKW WAR DIARY SERIES (Vols. 7, 8, 9, 10, and 11) (P-Series Studies).

PART V. THE WESTERN THEATER (Vol. 12).
- The French Campaign of 1940.
- The Atlantic Wall—five studies.
- The Ardennes Offensive—four studies.

PART VI. THE MEDITERRANEAN THEATER (Vols. 13 and 14).
- The Balkans—four studies (Vol. 13).
- Crete—two studies (Vol. 13).
- The Near East (Vol. 13).
- Africa—six studies (Vol. 14).
- Italy—six studies (Vol. 14).
- General (Vol. 14).

PART VII. THE EASTERN THEATER (Vols. 15, 16, 17, 18, and 19).
- The Polish Campaign of 1939 (Vol. 15).
- The Opening Phases of the Russian Campaign—three studies (Vol. 15).
- Four Major Battles (Vol. 16).
- Special Studies—12 DA Pamphlets (Vols. 17 and 18).
- Other Special Studies—13 studies (Vol. 19).

PART VIII. DIPLOMACY, STRATEGY, AND MILITARY THEORY (Vols. 20 and 21).
- International Law and Diplomacy—four studies (Vol. 20).
- Strategy, Military Theory, and Related Studies—six studies (Vol. 21).

PART IX. GERMAN MILITARY GOVERNMENT (Vol. 22).

PART X. SPECIAL TOPICS (Vols. 23 and 24).
- Military Studies—six studies (Vol. 23).
- Civilian, Auxiliary, and Party Formations—five studies in Vol. 23, two studies in Vol. 24).
- The German Opposition Against Hitler—seven studies (Vol. 24).
- The National Redoubt and the Final Collapse—six studies (Vol. 24).

All of these studies, published and unpublished, are invaluable as primary source documents for military historians. In defense of the project in 1947, General Dwight D. Eisenhower, then Army Chief of Staff, said, "In the absence of adequate German records, the reports by the German commanders of their operations are proving to be not only reliable, but the only information we will ever have as to what occurred on the German side. This is our one opportunity to prevent our own military history from being one-sided."

Now, in 1988, the German Military Studies deserve and need to be resurrected from obscurity and brought to the attention of professional infantrymen and military historians alike.

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LIGHT INFANTRY SCOUTS

Sergeant First Class John E. Foley

Light infantry scout platoons are invaluable to their units. During more than a year as platoon sergeant of one of these platoons in the 25th Infantry Division, however, I found that there is little in the way of doctrine to guide their training or employment, even in field manuals and training circulars. FC 7-15 dismisses scouts with little more than a paragraph and offers little guidance on how they are to accomplish their missions. In fact, the missions it assigns the scouts—area reconnaissance, zone reconnaissance, screen a stationary force, and screen a moving force—are themselves vague and incomplete as to what scouts can and cannot do, and how they are supposed to do it.

Reconnaissance is, of course, a scout platoon's primary mission, and its training must emphasize moving first, communicating second, and shooting last. In our platoon, for example, our battle drills were geared toward breaking contact in the event of a chance encounter with an enemy force. A five-man scout squad with only M16s for weapons lacks the firepower and the manpower to engage a squad size or larger element successfully in a protracted fire fight.

There are several profitable ways of employing scouts:

Area Reconnaissance. In an area reconnaissance (formerly called "Point Reconnaissance"), the scouts infiltrate an area to look at a specific point, such as a supply dump, a missile or artillery battery, a bridge, or a headquarters. By breaking up into two-man or three-man reconnaissance teams, a scout squad can infiltrate an area, find the information, and get out undetected. Larger teams would increase the chances of their being detected, and they would still lack the firepower to fight successfully and win against a superior force. Two or three men can also move more quickly and quietly than a full squad or platoon.

Zone Reconnaissance. A zone reconnaissance (called an "Area Reconnaissance" when I was in Ranger School) is an operation in which scouts search a large area to find out what is in it, but are not concerned with any specific point, at least not until they find something. A zone reconnaissance is just as demanding as an area reconnaissance, but the scout squads must also be able to give accurate reports on the terrain, roads, bridges, vegetation, towns, important man-made structures, and enemy activity in their zone. Is the terrain passable to wheeled or tracked vehicles? Even if our own forces do not have such vehicles, the enemy may have them, and scouts need to deal with all the facts concerning the terrain. (Important references to support these

first two missions are FM 21-26, Map Reading; FM 21-33, Terrain Analysis; FM 5-36, Route Reconnaissance and Classification; and FM 5-34, Engineer Field Data.)

Moving Screens. A scout platoon is not well suited for performing a moving screen mission. With only 18 M16s in the entire platoon, and on foot, it lacks the firepower and speed to be effective in delaying or stopping the enemy. In my unit's training, we found that our screens were too coarse. It was easy for our opponents to move through the gaps in them, and we did not have the manpower to cover much more than 600 meters at any one time.

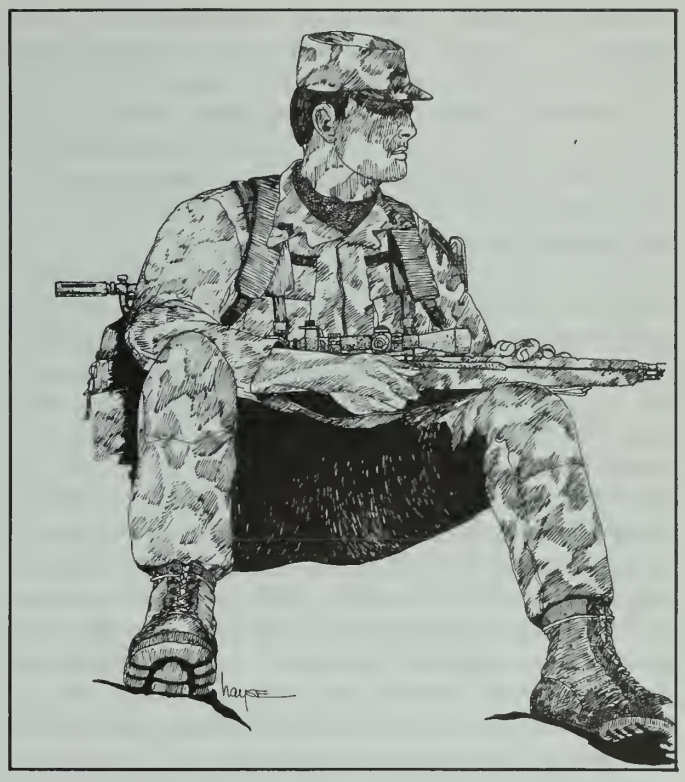
What we did find though was that instead of conducting a fighting screen, we did better by concentrating on likely avenues of approach and carrying as little as possible so we could move more rapidly. We did not try to keep the whole platoon together in these cases, but operated as squads under platoon control to screen a sector and used bounding overwatch techniques as the terrain permitted. Instead of engaging a force with our organic weapons, we trained constantly with the call-for-fire simulator and our fire support teams so that we could call mortar or artillery fire onto an enemy force. In case we had to do so, we also trained to use accurate long-range rifle fire (400 meters) with our M16s to place harassing fire on the enemy to force him to deploy and slow down, then rapidly maneuvered to the flanks or rear to keep the enemy under observation and avoid his retaliatory fires.

Another effective way to employ the scouts in a moving screen is to attach a squad directly to a rifle company and use it to reconnoiter and mark a route to an objective for the company. This works very well, especially if guides are used and men are left spaced along the route to keep what surveillance they can and to reduce the chance that a rifle company will be surprised. This also conserves a company's strength.

Stationary Screens. As with a moving screen, a stationary screen is coarse. Over a 2,000-meter flank with observation posts and patrols, we could not effectively screen that flank with 18 men, especially at night. It helps for the scouts to be augmented with ground surveillance radar (GSR), but the radar is severely limited by the terrain and by its range. A single rifle platoon is more effective, in terms of both firepower and manpower, in conducting this mission. Instead of ineffectively manning a stationary screen line, scouts have been better employed continuing to patrol likely avenues of approach so they can give early warning of an enemy approach.

Sniper Guides and Security. TC 23-14, Sniper Training and Employment, has many excellent and practical tips for scouts, and many of the sniper missions mirror the scout missions. The major difference between the two is that a scout is out to find and report the enemy without being detected, while a sniper is out to find the enemy undetected, selectively kill one or more of the enemy, and then withdraw.

Experimenting with a simple 4-power scope mounted on an M16, and at modest ranges of 400 to 600 meters, our platoon found it possible to put company commanders, radio operators, and machinegunners into the reticle pattern of the scope when they were invisible to the naked eye. This is not surprising. Employed correctly, a sniper platoon or section can kill almost as many enemy soldiers as an entire infantry battalion. The scouts' role is to provide security to a two-man or three-man sniper team moving into an area. Or, by studying the terrain, they can recommend likely sniper positions, for either sniper or counter-sniper work, and then link up with the snipers to escort them back in at the end of a mission, which is when they are most vulnerable. This scout-sniper partnership can be a profitable one and a true combat multiplier.



Guerrilla Hunter-Killer Teams. In a low-intensity conflict, operating against elusive terrorists or guerrillas, the scouts can be used offensively, forgoing their traditional rule against engaging the enemy except in self-defense. Trained to operate in small teams and infiltrate areas, the scouts can aggressively seek out and kill guerrillas where they find them, with ambushes or meeting engagements. Most guerrilla or terrorist groups are small and have limited arms and ammunition. In addition, they are not likely to be trained or disciplined scout squads. Here, any firepower disadvantage is nullified.

The addition of a SAW to each squad would better enable it to engage these enemies, and in an actual situation, the scouts will probably borrow SAWs for such missions if they do not have their own.

(The Philippine Army discovered this while fighting the HUKs in the 1950s. Saturating an area with two-man or three-man teams, and engaging the guerrillas where they found them, the Philippine Army successfully kept the pressure on and destroyed the insurrection.)

Using aggressive tactics along with common sense—if there are too many, call for help—a scout platoon can infiltrate, surprise, and demoralize an enemy in what he normally would consider "safe" territory. Extra training would be needed for scouts to identify the enemy before engaging him, and to take him prisoner, but this would be an economical means of hurting the enemy, especially if used in conjunction with snipers.

Engineer Reconnaissance. Taking advantage of the secondary MOS of combat engineer held by one of the squad leaders, our platoon learned the basics of engineer reconnaissance. FM 5-25, Explosives and Demolitions, and FM 5-34, Engineer Field Data, were our primary guides. Out in the field, we looked at how much explosives would be needed to crater a road or blow a bridge, not so that we could do the dirty work ourselves but so that we could give the engineers an accurate working estimate of what they would need to do it. Scouts can also look at the condition and width of roads, railroads, gradients of curves, steepness of slopes, availability and suitability of lumber in a given area for construction purposes, and the soundness, type, and number of buildings in a town or village. Sewer systems are another area of interest, both for engineering purposes and for general reconnaissance work, and tunnels or culverts also need to be accurately recorded.

Motorcycle Scouts. The 7th Infantry Division (Light) and the 101st Airborne Division (Air Assault) have been experimenting and working with motorcycle scouts for some time now. Hearing that we were due to get motorcycles in the scout platoon was a cause for concern on my part, rejoicing on the part of the scouts, and nightmares on the part of my commander. (He had a hellish vision of scouts in BDU leathers, with cow horns glued to their Kevlar helmets, roaring out of the motorpool doing wheelies while 5,000-amp speakers blared the tune "Born to be Wild.")

Looking at historical examples, our platoon organization, and the terrain we operated in, I envisioned the motorcycles being used to get into and out of an area quickly. At the same time, though, I knew we would be more vulnerable because we would be forced to use terrain that the motorcycles could traverse.

In the old horse cavalry, one in five troopers would stay with the horses while the rest dismounted and crept forward to scout or skirmish. Scouts could follow their lead and leave one man with the motorcycles in an objective rallying point while the rest went forward to scout. If the ORP was compromised, however, while the rest of the squad was away, the "horse-holder" could not ride away with the other motorcycles in tow as he could have with horses. But he could give warning to the rest of the squad or, if it was a small enemy element, fight them off until the rest of the squad could link up.

Since we had several men in the platoon who were experienced dirt bikers, we discussed other ways of using the motorcycles. On roads or passable terrain, they would allow us to conduct an effective reconnaissance screen by giving us superior mobility even though our fighting power would still be low. Scouts on motorcycles should therefore be expected to do little more than give reports; a five-man scout squad, even on motorcycles, should not be expected to seriously delay an enemy company.

To ensure communications as well as operational security, motorcycle scouts can also be used to carry messages. Even if secure radio is used, the fact that there is traffic at all can be of intelligence value. Or if radio contact cannot be made, the scouts can be sent out to gain contact and perhaps set up radio relays.

The greatest advantage motorcycles give scouts is the ability to move rapidly to the flanks of an area or objective, saving valuable time in moving in secure areas and, at the same time, conserving the strength of the scouts. If scouts could make long flanking movements of 10 to 50 kilometers, they could infiltrate an area from an unlikely direction, cache their bikes and move in on foot, and then have a rapid means of withdrawing from the area. They could outrun most types of pursuit, increasing the chances that at least one member of the squad would get back with critical information.

Helicopter Landing Site (HLS) Support. The 25th Infantry Division has an excellent scout pathfinder course, which my platoon took advantage of. Such training enabled the scouts to infiltrate an area, reconnoiter, and set up an HLS, and this proved invaluable to the battalion. While scouts cannot hope to secure an entire HLS, they can pick one that is free of enemy troops and control it day or night, either to bring friendly troops in or to take them out.

Our platoon's main training emphasis was on infiltrating an area and selecting and setting up an HLS to bring airmobile troops into an area rapidly. (Ground guides can also be used to lead units into assembly areas, lessening the confusion on the ground, especially at night.)

TRANSPORTATION

While motorcycles still lie in the future, light infantry scouts must continue to rely on their most reliable means of transportation, their feet. This method is slow but steady, and foot-mobile scouts can traverse the roughest of terrain, terrain that is impassable to other types of transportation, in any light or any weather.

To toughen themselves for their mission, scouts need to walk constantly over all types of terrain. Just walking is not enough, however. The men need to learn how to walk quietly. It will do scouts no good to infiltrate an area and then stomp around like drunken elephants.

This kind of training might consist of rousing the men at midnight to infiltrate areas while keeping one squad on watch, or into a perimeter of a unit that is in training, teaching the men to walk quietly and feel with their feet before putting pressure down. The scouts might use the high and low crawl to move unheard and unseen out of an area, or be aware at all times of where there is cover and how to disappear quickly and quietly. This type of training takes time,

though; for example, soldiers are often surprised to find it takes hours to cover 200 meters.

There are some good references to use in teaching the men to make the most of foot movement: LTC Rex Applegate's book *Scouting and Patrolling*—(based on what worked in World War II)—contains many excellent training ideas on moving quietly and unseen; TC 23-14, Sniper Training and Employment; and FM 21-75, Combat Training of the Individual Soldier and Patrolling.

Trucks

If they are available, trucks can be used to move scouts forward, but not up to an objective! This speeds things up and increases the distance that can be reconnoitered in a given time, but all hills, culverts, bridges, tunnels, and likely ambush positions must be checked out on foot. Scouts cannot afford to get lazy and simply motor along. They must be suspicious of and investigate everything if they are to conduct an effective route reconnaissance. Using two vehicles is best, and they should use standard bounding overwatch techniques.

If a machinegun for each vehicle can be borrowed, either a SAW or an M60, it will increase the patrol's security and firepower. And if a vehicle is available to carry extra weapons and ammunition, the scouts should make use of it.

Helicopters

Helicopters are also a favored means of moving a scout platoon long distances rapidly, but this depends on the availability of aircraft and the enemy's air defense artillery posture. An armed escort is also needed.

If helicopters are available, a good bump plan, usually controlled by the platoon sergeant, is a must, because sometimes the helicopters cannot carry their planned loads due to weather conditions.

At the aircraft commanders briefing, routes, false insertion points, the primary and alternate landing sites, and the pickup sites should be coordinated. Once on the ground after an airmobile insertion, scouts must assume that the enemy has been alerted that someone is in the area and should get off the landing zone fast. It is preferable to land as close to a treeline as possible, have everyone leave the helicopter by the side closest to cover, and then move rapidly away from the LZ. Since scout squads are small, this has proved to be a workable method, and the time on the LZ is short, which helps security.

On pickup zones (PZs) a scout squad reconnoiters the area, or the entire platoon links up and reconnoiters the PZ, marks it, and prepares for the helicopters to come in. The scouts can then either guide companies or platoons into assembly areas for extraction or set them up to be extracted. For security, it is preferable for the entire scout unit, if operating alone, to be extracted on one lift.

Fixed-Wing Aircraft

Fixed-wing aircraft can also be used. A five-man scout squad can fit in almost anywhere and with a short take-off and landing (STOL) aircraft such as an OV-10 the long range and higher speeds can be capitalized on to insert scouts, provided suitable landing sites are available. Once on the ground after an airborne movement, whether in training or in combat, the scouts should immediately start reconning the area and preparing reconnaissance reports, making map corrections, and getting a feel for the new area of operations. (We did this in Thailand on operation COBRA GOLD, and it proved a valuable training experience to do actual reconnaissance missions—without someone shooting at us—in a totally foreign environment, and shortly after a long flight.)

LOGISTICS

Logistical planning is also an important part of scout operations. Scouts can carry only so much and their endurance is limited, which means they should start out planning on only one or two MREs a day, and no T-rations or A-rations, plus carrying up to two gallons of water per man.

Survival techniques can help, but even with water purification tablets and straining water out of mud puddles for emergency resupply, our platoon ran into the problem of finding no water at all in some areas. Scouts can do without food, or go on short rations and still function, but water is a must.

We would have the entire platoon link up in a patrol base and then be consolidated for an aerial resupply, either by helicopter or fixed-wing aircraft. This needs to be coordinated before a mission, and once resupply has been received (water, food, ammunition, batteries), scouts must immediately move out of the area. The price for survival is to be eternally vigilant, and while scouts must have supplies, they cannot afford to get lax in receiving them.

Another workable method of getting supplies is to link up with a patrol from a rifle company; the company carries extra supplies and either conducts a link-up or caches the supplies at a pre-designated point for the scouts' later use. If scouts move out with an infantry company, the com-

pany can cache supplies for the scouts and move back while the scouts stay in the area and conduct their own mission. This is the old "stayback" technique. If the scouts have the supplies they need to stay, without exposing their position, they can conduct a long recon of the area.

Linking up with a convoy at a pre-coordinated rest stop is another way a scout squad or platoon can be resupplied covertly. Sticking to the old Ranger adage of "Travel light, freeze at night," scouts can also take into consideration the minimum amount of supplies they need to survive and plan their missions for 12 to 48 hours in duration. Living off the land is sometimes possible, but it means spending a lot of time foraging or shopping with the people of an area, both of which can expose a scout squad and make it less effective, and also set it up for ambush.

But it is not always possible to live off the land. The British in Malaysia, for example, started to gain the upper hand over the communist guerrillas when they controlled the food supply and starved the guerrillas out. In Vietnam, capturing food caches also made the Viet Cong less effective, because they, too, were kept busy trying to find something to eat instead of fighting. With the few assets available to light infantry units, and the fact that the enemy situation may make it impossible for the company XO or support platoon to truck out and resupply the scouts, they must plan long and well before a mission as to how and when they are to be resupplied.

SCOUT COMMUNICATIONS

Because their mission requires communicating what they have learned, all scouts need to be trained to be competent radio telephone operators (RTOs) and to master the use of field expedient antennas. Since the only radios in our platoon were PRC-68s and PRC-77s, we had to extend their range to maintain communications. For security and counter-jamming, we preferred to use directional field expedient antennas with resistors so that we could transmit in one direction only. This reduced our chances of having a radio direction-finder pinpoint us and also increased the range of our radios. Transmission and reception over 25 kilometers were successful with the field expedient antennas and our PRC-77 radios. When used with secure radio devices, our communications were still more secure.

Depending on the situation, if scouts are out of radio range with their higher headquarters, aircraft with radios compatible with theirs can be coordinated to make communication "windows" and serve as radio relays or simply to take in reports of what the scouts have found, or to call in close air support when the scouts are out of range of artillery. While scouts prefer to stay within the range of supporting fires from friendly mortars and artillery, this is not always possible, and in light infantry units artillery support may not be initially available.

Wire can also be used when scouts man observation posts and if the distance is short. One technique is to run the wire from a static OP to a radio site, where a directional antenna is set up; then continuous reports can be made without breaching communications security.

If all else fails, scouts can go back to their ultimate contingency, the foot messenger. This is why all the scouts need to know what is going on all the time, where they are, and how to use a map and compass to return to friendly lines. All scouts need to be intensively trained in land navigation and escape and evasion techniques. If the radios fail, two scouts can be dispatched to carry vital information back to friendly forces (while the information is still vital). Or in the event a patrol is ambushed, the rear men can break contact and get back with the information. We stressed in our platoon not to be heroes—that getting back with the information was the primary responsibility.

During the Korean War at the time of the Chinese intervention, entire reconnaissance patrols of 10 to 15 men would disappear without a trace. As a result, the large massed attacks of the Chinese came largely as a surprise. Communist doctrine still places great emphasis on counter-reconnaissance and if an entire reconnaissance team is captured or killed no information will get back.

To counter this, scouts must train to keep good dispersion, and if they are hit hard the rear men must not stop but must move immediately back to the last designated rally point and wait a set period of time. If the rest of the patrol cannot or does not link up, the remaining men must continue the mission by bringing back the information obtained. One way or another, scouts must communicate.

In summary, scouts must be highly trained and highly motivated. With the high leader-to-led radio (two NCOs for every three enlisted soldiers), much time can be devoted to the individual soldier, much more so than in a rifle platoon, to bring him to a high standard.

Scouts should be employed in accordance with their capabilities, and also with an understanding of their limitations. Unless they are provided with aircraft or vehicles, scouts move slowly, have little firepower, and carry a limited amount of supplies and equipment. Yet by using survival techniques and an intelligent resupply plan, they can stay in an area for a fairly long time; they are hard to spot; and they make it a point to be harder to catch.

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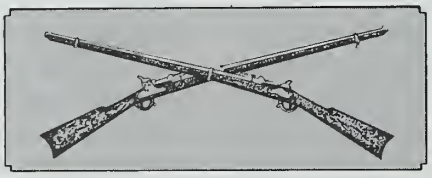

Infantry In Action

PURSUIT

MAJOR JOHN R. FLYNN

EDITOR'S NOTE: This is an edited version of an article that appeared in the Infantry School Quarterly, *July 1952, pages 94-98. the author, who was then a tactics instructor in the Infantry School, had previously served with the 1st Cavalry Division in Korea as a company commander and a battalion and regimental S-3 in the 7th Cavalry.*

"The pursuit starts when the enemy cannot maintain his position and endeavors to escape by retreat."

This statement, from Field Manual 7-10, accurately describes the situation in Korea along the Naktong River around 20 September 1950. During the earlier part of the month, United Nations forces began a series of heavy battalion and regimental attacks from the Pusan Perimeter which were coordinated with the Inchon landing. Unable to resist this savage vigor and relentless pressure, the North Koreans were severely mauled and decimated. Between 17 and 24 September, the disorganized enemy was in hasty flight toward the northern escape routes to prevent capture or annihilation.

The 7th Cavalry Regiment's 2d Battalion had bludgeoned and beaten its way through a strong defense line near Waegwan around 17 September. The other battalions of this regiment poured through the hole and began a series of hill and road clearing missions which ended near a village called Tabu-dong.

Here, the 3d Battalion and its attachments became "Task Force Lynch" and started the motorized pursuit of the North Korean units. Moving rapidly, the first day and night this task force destroyed many enemy and captured a great deal of equipment; crossed the Naktong River and established a bridgehead for the 1st Cavalry Division; and finally reached Sangju, some 36 miles from Tabu-dong.

Enter Company K, 7th Cavalry. From Sangju to Poun—another 36 miles—Company K was to move out on regimental order to continue the pursuit.

About 1030 on 23 September, the company commander received a warning order: "Prepare to move out!" Thirty minutes later, a fragmentary order arrived from battalion: "Report to regiment. You'll move your company to a town called Poun. Unless you encounter strong resistance, keep going and keep us informed. When you get to Poun, give us a situation report. Additional instructions will follow." Quite brief, but in such a rapidly moving situation mission-type orders were necessary. The company commander was permitted maximum flexibility in the accomplishment of his mission since he was operating at such an extended distance from his parent unit.

After receiving this order, the company commander reported to regimental headquarters for the final briefing. Understandably, he received meager information on road conditions, friendly unit locations, and the enemy. He was given a 1:250,000 map—the only map the company was to have during the operation. A route was designated. Speed was so important that the briefing might be summed up as, "GET ON THE ROAD AND GET MOVING!"

His diminutive task force included one rifle company, one section of tanks, one 75mm recoilless rifle mounted on a jeep, a section of heavy machineguns mounted on jeeps, and an artillery forward observer (Figure 1).

Initially, the company commander's jeep was leading the column. Since there was only one map for the entire unit, he positioned himself where he could control and guide the column. Another factor influencing this decision was the absence of radio communication with the tanks. The com-

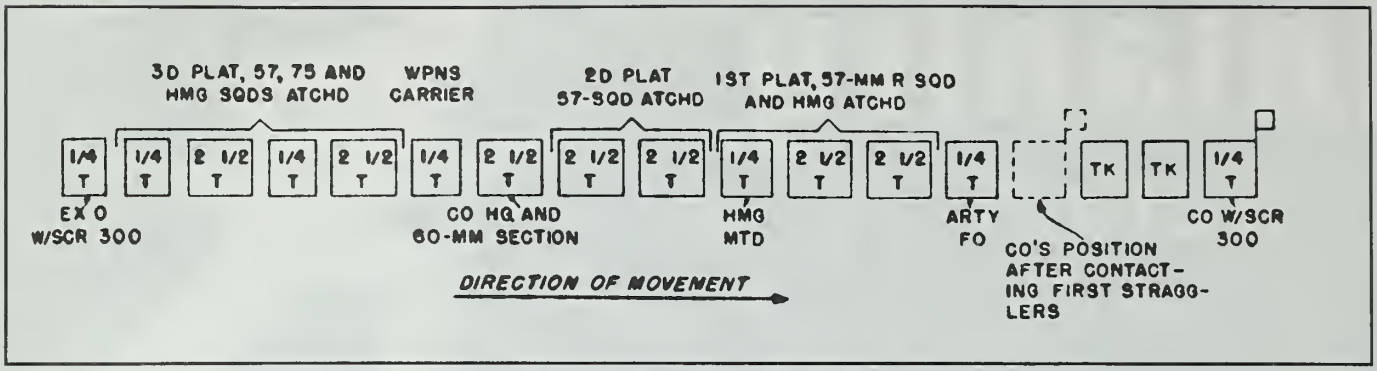

Figure 1. Composition of the task force.

pany commander changed his position after he was certain the tanks knew how fast they were to move and what they were to do in case of doubt.

About five miles out of Sangju, the first "Situation and Requirement" confronted the company commander (see Figure 2). He came upon a large crater in the road with a bank on the right and a sheer drop on the left that prevented any thought of bypassing it. A mediocre repair job had enabled rear-guard North Korean units to cross, but a few logs could never hold our trucks, much less the two tanks.

PIONEER WORK

Solution: the men were ordered to dismount and begin pioneer work to bolster the existing repairs. Stones, logs, and dirt increased the load-bearing capacity of the repair sufficiently for the trucks to cross. As the first tank rolled over the bad spot it nearly obliterated the company's repair efforts; the second tank almost rolled over the side as the road gave way beneath the tracks, but it finally made its way to firm ground: The company had crossed.

The men climbed back into the trucks and the column moved on. At the next wide place in the road, the lead tank passed the trucks and resumed its former place in the task force. Regiment was informed by radio of this obstacle and engineer assistance was requested to insure a rapid follow-up by the rest of the battalion.

The company commander realized that mobility and rapid movement were his security. For this reason, no attempt was made to check each defile, village, hill mass, or fold in the ground. No flank security was put out. However, a distance of 200 to 250 yards between vehicles was maintained to prevent a successful ambush of more than one vehicle. Of course, while moving through mountains this distance was reduced. It was hoped that this formation would deceive any enemy encountered as to the exact length and composition of the column.

Another security plan—signalled by firing a white star cluster—was the pre-arranged deployment that placed the platoons and attachments on either the right or the left of the road. Other alert measures—air guards and sectors of observation for each truck, tactical grouping, weapons and ammunition ready for action—were included in the security plan. Even while passing through mountain roads, security measures were limited to infrequent halts and quick visual reconnaissance.

The second "Situation and Requirement" confronted the company commander a few miles beyond the cratered road: Engine trouble halted one of the tanks. Should the company commander halt the entire column and wait until the tank was repaired?

When the tank section leader reported that the repair time would be about 20 minutes, the commander decided that the tank could catch up. There was still considerable territory to cover and time was precious; there wasn't too much daylight left; the route was easy to follow and could be marked at the critical spots. One squad of infantrymen stayed with the tank for security.

The tank rejoined the column several miles beyond the breakdown point.

Sixteen miles from Sangju, the company contacted the first enemy straggler column. The North Koreans were spotted just as the tanks turned into a wide valley on a straight road. The range was about 600 yards. The North Koreans evidently thought that the column was friendly, for they made no effort to get off the road and practically ignored the tanks until a round of HE landed in their midst. The company commander ordered the tanks forward, and they moved down the road, firing at the enemy column. The company commander then ordered a platoon to dismount and to follow and assist the tanks (since the exact strength and capabilities of the enemy were not known). The enemy, taken by complete surprise, fled into the rice paddies and scrambled up into the hills. Three were captured and several were killed. The rifle platoon cleared the rice paddies on the sides of the road.

ADVANCE

Once the road was clear, the troops got back on the trucks and the advance continued. Several other straggler columns were encountered and similar actions took place, except that it was not necessary to dismount the infantrymen. (Admittedly, the company was fortunate—several days later, units using the same route were ambushed and delayed by small North Korean units retreating from the south.)

Upon arrival at Poun, about 1730, dust clouds from enemy vehicles could be seen several thousand yards to the

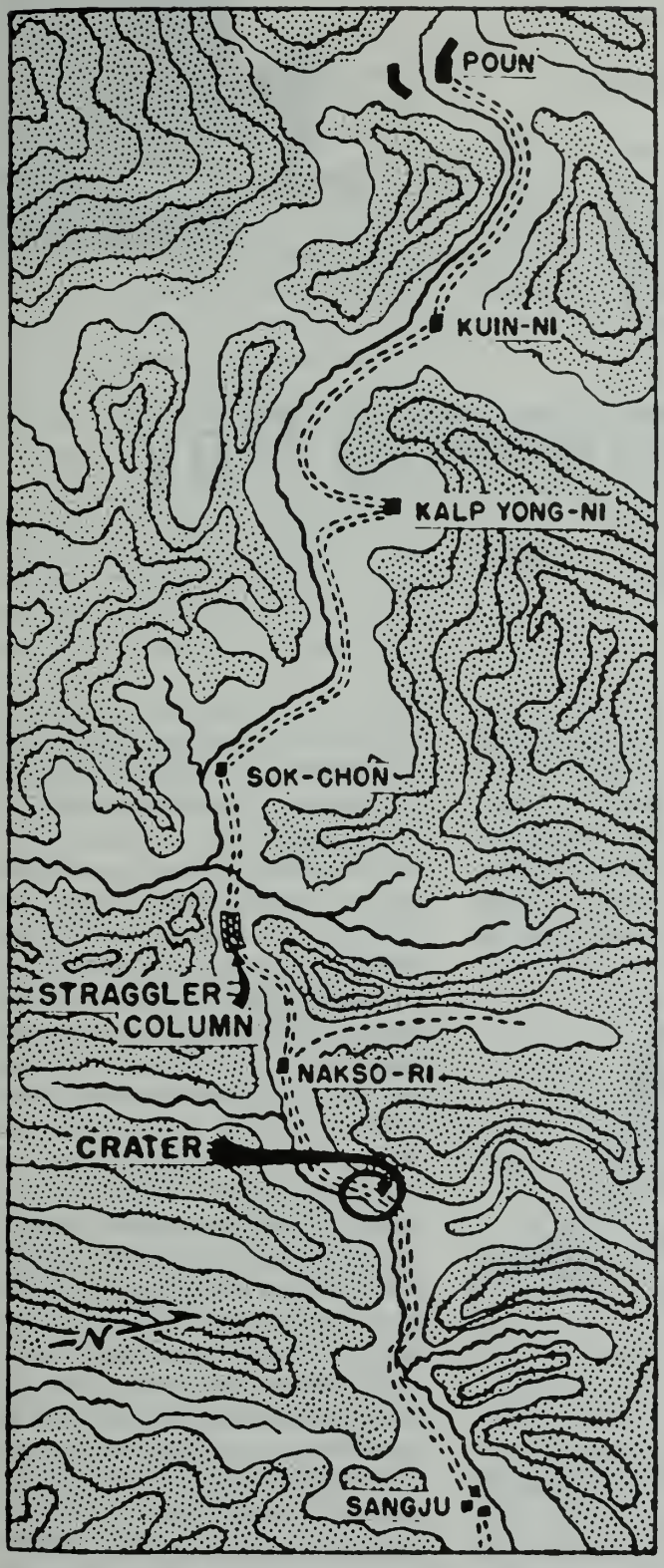

Figure 2. Strip map of the route taken by Company K in its pursuit. The distance from Sangju to Poun is 36 miles.

north. Although most of the enemy had left town just ahead of our entry, stragglers in white retreat clothing were passing through the town and filing along the little hills and ridges surrounding it. Tank and infantry patrols picked up many of these stragglers while clearing the town. Local civilians reported that the main body of North Koreans had left Poun about 1700.

Just as the company was securing the town, a friendly light plane came in low to check the company's identity. The platoons displayed air panels, and the plane headed home to report. Since the company had out-run radio communications after the first five miles and scheduled light-air cover had not materialized, this was the only communication Company K had with a friendly unit that day.

After dark, all roads leading into the city were blocked. About midnight, the heavy machineguns attached to the first platoon began their staccato fire: A jeep carrying five North Koreans had driven up to within 20 yards of the platoon's position. One of the communists was wounded and captured, the others escaped, and one serviceable jeep was added to the company's transportation.

REVIEW

About 0200, three North Korean officers from the 3d NK Division drove into one of the second platoon's positions. An alert sentry captured the officers, their jeep, and a sizeable payroll. The rest of the night was quiet, except for the revelry of the local populace.

The rest of the 3d Battalion moved into Poun about noon the next day.

Looking back, certain facts are worthy of review. For example, the lack of time to plan and prepare this operation and the need for speed resulted in the sacrifice of some rather important details: No rations were taken by the company, no extra gasoline was provided for the tanks in case it became necessary to return to the starting point.

A section of tanks was not adequate; a tank platoon would have been more effective, but a gasoline shortage prevented this. Had a platoon been provided, one section could have been placed at the head of the column with the other either midway back or at the tail.

Communications were woefully inadequate. Had the planned air cover materialized, communications with the parent unit could have been maintained.

On this mission, Company K and its attachments captured 44 prisoners, including three officers, killed 18 enemy soldiers, and wounded an unknown number. The town of Poun was secured for use as the supply and operational base for the final phase of the pursuit, which ended when the 7th Cavalry Regiment met elements of the 7th Division near Osan. No casualties were sustained by the company or its attachments, and there were no losses of vehicles or equipment.

For the pursuit from Tabu-dong to Osan, of which the dash from Sangju to Poun was an important part, the 3d Battalion received the Distinguished Unit Citation.

TRAINING NOTES

Dismounted Training Day

LIEUTENANT MICHAEL P. RYAN

In many mechanized infantry battalions, particularly those located overseas where changes in personnel are frequent and mission and deployment schedules are intensified, there is often a lack of dismounted infantry training at the small unit level. This lack of training may create a dangerous situation for a unit if it should be deployed to a combat situation and called upon to carry out both mounted and dismounted operations to support a tactical plan.

In addition, it is important for mechanized infantry soldiers to understand that an armored personnel carrier (APC) is not a safe haven on the battlefield. It is no secret even to the most casual observer of modern warfare that today's highly mobile mechanized infantrymen are likely to become foot soldiers in the truest sense of the term soon after their unit has been committed to the fight. Even discounting hostile fire, there is always the problem of mechanical difficulties when APCs are operated under field conditions. In peacetime, "down" vehicles are a logistical headache; in wartime, they are a deadly serious problem.

We must therefore strive to train our mechanized infantrymen to perform equally well without the fire support, mobility, and long range communications capabilities of their APCs. We should stress training situations that get them out of their tracks and onto the ground on a regular basis.

It is probably fair to say that leaders in mechanized infantry battalions would be more than happy to do more dismounted small unit training. But

several factors (many unique to mechanized units) tend to combine to make this difficult:

- Vehicle maintenance, often the absolute, number one priority in garrison, takes an enormous amount of a battalion's time and manpower. Frequent command inspections, IG inspections, scheduled services (Q, S, A), daily PMCS, and command motor stables require most of a unit's soldiers and leaders for extended periods. Major field exercises and long range deployments of mechanized units also require extensive periods of preoperative and postoperative vehicle maintenance.
- Major training exercises and large scale deployments (such as REFORGER in Germany and TEAM SPIRIT in Korea) are controlled at such high echelons that they preclude any real small unit training. (Most units spend their time reacting to missions sent down by a higher headquarters or waiting in the "on order" mode for movement instructions.)
- As with all units, additional duties, taskings, temporary duty, schools, work details, and post support commitments all combine to draw soldiers away from their units (and away from potential training) on a daily basis.

Still, certain steps can be taken to improve the dismounted proficiency of our mechanized soldiers. One suggestion is to implement a mandatory "Dismounted Training Day" (DTD) for each company in a battalion, to be held weekly or biweekly, depending on the battalion's upcoming mission or deployment schedule. This training should be scheduled, monitored, and strongly emphasized at battalion level, but it should be planned and executed by company level leaders.

The training on these days should emphasize basic dismounted missions

and common tasks as they relate to these missions. The annual Expert Infantryman's Badge (EIB) testing provides excellent training for all infantrymen, as does common task training (CTT). But this training is no substitute for leaders teaching their soldiers how these basic skills serve as building blocks for successful missions. A soldier should know not only *how* to load and fire his M60 machinegun but also *why* crew-served weapons are essential to the success of his dismounted mission.

A dismounted training day should be conducted, if possible, in a local training area that is within road marching distance. This will eliminate the need for vehicular support from a transportation platoon or for movement of the unit's APCs. It will also force each company to road march at least every two weeks, and this is a skill that is absolutely critical to all infantrymen.

Leaders should try to decrease distractions and logistical requirements as much as possible. (The battalion S-3 should provide guidance and limited support.) Each soldier should carry only his rucksack with seasonal load and one MRE (meal, ready to eat) for the noon meal. His uniform should include helmet, load carrying equipment, protective mask, and individual weapon.

If this training is to be effective, the battalion commander must support and emphasize it. Everyone concerned must understand that when the battalion is not deployed to the field, DTD goes on, rain or shine, hell or high water. This is the only way a company will be able to set aside at least one day every two weeks for dismounted training and nothing else.

A typical dismounted training day schedule might resemble the sample shown here. Although this schedule uses a raid as the training vehicle, the topics for DTDs are virtually unlimited and might include movements to contact, infiltration techniques, withdrawals, and deliberate attacks, among others.

One of the most important aspects of DTDs is the involvement of the company commander. All too often, in garrison he is cloistered in meetings and briefings or has an office full of paperwork. When his unit deploys to the field he is constantly rushing either to operation order briefings, to meetings, or to planning sessions at the company command post. Because of the distances mechanized infantry companies often must cover during tactical operations, the commander may become, for days at a time, only a disembodied voice over the company net.

A dismounted training day gives the company commander an uninterrupted period of time (short though it may be) in which to teach, direct, and interact with the soldiers of his unit on a more personal basis. This closer interaction will enable him to get to know his people better and to better judge the strengths and weaknesses of his company. Free from the usual pressures, he can also work on the development of his lieutenants.

This same principle holds true for platoon and squad leaders; they can work with their people in a somewhat more relaxed environment. Unit SOPs can be forged, mistakes can be made, and everyone can contribute to the learning process.

Mechanized infantry headquarters companies containing scout, antiarmor, or heavy mortar platoons should also be included in DTDs. This can be an excellent opportunity for these specialty platoons to practice skills and techniques apart from their standard missions. This will also break the monotony of their usual training and allow their soldiers and leaders to teach and learn and to become more well-rounded infantrymen.

The involvement of junior leaders as instructors cannot be overemphasized. This training can serve not only to build a more proficient dismounted unit, but also to develop the tactical and teaching skills of the unit's platoon, squad, and team leaders. These leaders should be tasked with presenting most of the scheduled training. The more experience they get in front of their men, the more comfortable they will become, and the more confidence their men will have in their abilities.

Today's young infantry soldiers—whether airborne, light, mechanized infantry, or any other kind—must be able to accomplish any assigned mission and they deserve the best training possible. As leaders, we must prepare them for every contingency. This means we must use any and all of our available time to build confident, competent units.

SAMPLE DISMOUNTED TRAINING DAY SCHEDULE

TIME	EVENT	OIC/NCOIC	LOCATION
0500	Company formation/weapons draw	First Sgt	Co area
0600	Early chow	Plt Sgts	Co mess
0700	Road march to training site	Co Cdr	
0800	Platoon raid (an overview)	Co Cdr	Tng Site A
0900	Round Robin classes	Co Cdr	Tng Site A
	Station 1. Support team	1 PL/PSgt	
	Station 2. Assault team	2 PL/PSgt	
	Station 3. Consolidate/ reorganize	3 PL/PSgt	
1200	Chow (MREs)	PSgts	Tng Site A
1300	Walk/talk through platoon raid in separate platoon areas	PLs/PSgts	Tng Site A
1400	Execute platoon raid	PLs/PSgts	Tng Site A
1630	Critique/after action review	Co Cdr	Tng Site A
1700	Road march to company area	Co Cdr	
1800	Company formation/weapons cleaning/weapons turn-in	First Sgt	Co area

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CPX Planning

For A Battalion Staff

CAPTAIN ANTHONY R. GARRETT

Today, because of resource constraints, an infantry battalion has a limited amount of field training time available. Therefore, more of that time is usually devoted to tactical ARTEP missions than to staff functions. For this reason, the command post exercise (CPX) has become the primary tool for training a battalion staff. Unfortunately, definitive guidance and information on CPX planning is extremely limited.

The following planning process, developed at the Military District of Washington, is offered as a technique for conducting staff procedural CPXs:

CPX planning begins with identifying the exercise objectives. Only those activities that are applicable to either a unit's wartime mission or its transition from a peacetime to a wartime posture should be considered. Because of the detailed level of knowledge required to understand the various staff functions, each staff principal becomes responsible for identifying objectives for his functional area.

The principal considerations when identifying objectives are the following:

- An objective should provide for the evaluation of a procedure or a system.
- The more critical an objective is, the more often it should be exercised.
- How often a battalion conducts this kind of CPX should influence how often a particular objective is included.
- Objectives that have been identified in the after action reports of previous exercises should be examined to determine whether they should be reevaluated.
- The resources to support the evaluation of an objective should be available.

Once the objectives have been identified, a scenario is developed on the basis of these objectives. The S-3 reviews the input from the staff principals and develops a realistic scenario in which all of the objectives can be evaluated. Ideally, the scenario will focus on the unit's assigned real world missions.

Several issues must be considered during this phase:

- Security classifications, if any, that could restrict the flow of information during the planning, execution, and evaluation phases.
- Pre-exercise events that must be implemented.
- Assumptions and artificialities that support player participation during the active phase of the exercise.

Special consideration should also be given to the availability of various types of administrative support:

- Personnel to act as evaluators and controllers. (It is desirable for these participants to have a working knowledge of staff functions at battalion level.)
- A facility in which to conduct the exercise. (Distractors can be kept to a minimum if the exercise is conducted outside the battalion area. If possible, the players and controllers should be separated.)
- Communications for the exercise.
- Reproduction equipment. (A CPX will generate a large number of documents during the planning and execution, and this equipment should be accessible and reliable.)
- Video recording equipment. (Recording the active phase of the exercise and reviewing it during the after action review provides valuable training. A VCR system should be used during the exercise if one is available through the training support center.)

The scope of the exercise and the objectives will determine the level of participation. The following four-step process will help in identifying the exercise participants:

- Staff principals review internal procedures and identify the level of participation required to evaluate the objectives.
- Planners consider non-unit participants (who should have been identified during the development of objectives) in light of the consequences if they cannot participate.
- Staff principals consider factors that may influence their selection of participants—cost, availability of personnel, and the demands of the existing workloads.
- The exercise planners develop a list of participants.

The next step is planning the evaluation process. Although evaluation planning is somewhat technical, it is not necessarily complex. The primary criteria for an evaluation should be that it is useful and that it is understood by the users. The evaluation structure used

in CPXs consists of two subparts:

Elements of Evaluation. These elements are broad questions whose answers contribute to the evaluation of the objective. In developing his elements, a staff principal identifies the systems or procedures to be implemented during the exercises; identifies the steps contained within the system or procedure; and formulates these steps into evaluation questions. When reviewed collectively, the answers to these questions will enable a staff principal to determine whether a particular objective has been achieved.

Data Collection Form. This form is used to record the data collected during the CPX. It should be a one-page form tailored to the exercise, identifying, at least, the point of contact, the exercise objective, and the element to be evaluated. Any special instructions to the evaluator should also be included. A data collection form should be prepared by the staff principals for each objective.

MSEL

Pre-exercise planning focuses on actions leading up to and including the start of the exercise. A master scenario event list (MSEL) is created by the staff principals to generate exercise activity in support of their objectives.

The following are guidelines for developing this list:

- Each event should be concise and brief.
- Each event should generate activity in a particular staff section in support of an objective.
- Some events may generate activity in another staff section, causing interactions among several sections.
- Events may be generated for simulated players or non-unit players and introduced by the controllers.

To achieve a common understanding of the exercise and any specific procedures that will be used during the active phase, some pre-exercise training is needed. This training should be coordinated by the S-3 and supported by the other staff sections. The following subject areas are usually addressed:

For the players:

- Scenario background and an exercise overview.
- An overview of the exercise objectives and the evaluation procedures.
- Communications support.
- Procedures to be used during the exercise.

For the evaluators:

- An overview of the exercise scenario and the flow of events.
- Evaluation procedures to be used.
- Working relationships with the players and controllers.

For the controllers:

- An overview of the exercise scenario and the flow of events.
- General controller functions and responsibilities.
- Specific controller responsibilities within the control group.
- Working relationships with the players and evaluators.

Given the resource limitations and the existing workload, a CPX is the most efficient and effective training vehicle for a battalion staff. The procedures outlined here provide an overview of the CPX planning process and can help staff principals to develop procedural CPXs that support their battalion's tactical ARTEP missions.

Additional information, including a "how to" planning guide, is available in an exercise planning manual developed by the Military District of Washington. Anyone who is interested may request a copy from Commander, USA MDW, ATTN: ANOPS-OP-P (Captain Garrett), Fort McNair, Washington, DC 20319-5050.

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CSS Training

MAJOR GLENN W. DAVIS

The supplies required to keep men and machines going in combat neither grow on trees nor appear magically. Out of the struggle to sustain victory or deny defeat comes the regular order of business of combat service support (CSS) elements—to be there with what the commanders need when they need it.

Although combat service support elements regularly deploy and train with their organic task forces, they are rarely trained in the techniques of combat actions and reactions during the execution of their duties. It is crucial that CSS soldiers be able to think and act independently in combat, because if their efforts to sustain the combat

forces cannot be guaranteed at the outset, then the success of any operation a unit undertakes is already in question.

Specialty platoon leaders and maintenance supervisors may find it difficult to train their men to that level of proficiency. Although their men usually know what to do, all too often unforeseen requirements seem to take them away from training for hours at a time. How can they train their soldiers to react, survive, and possibly operate alone at times?

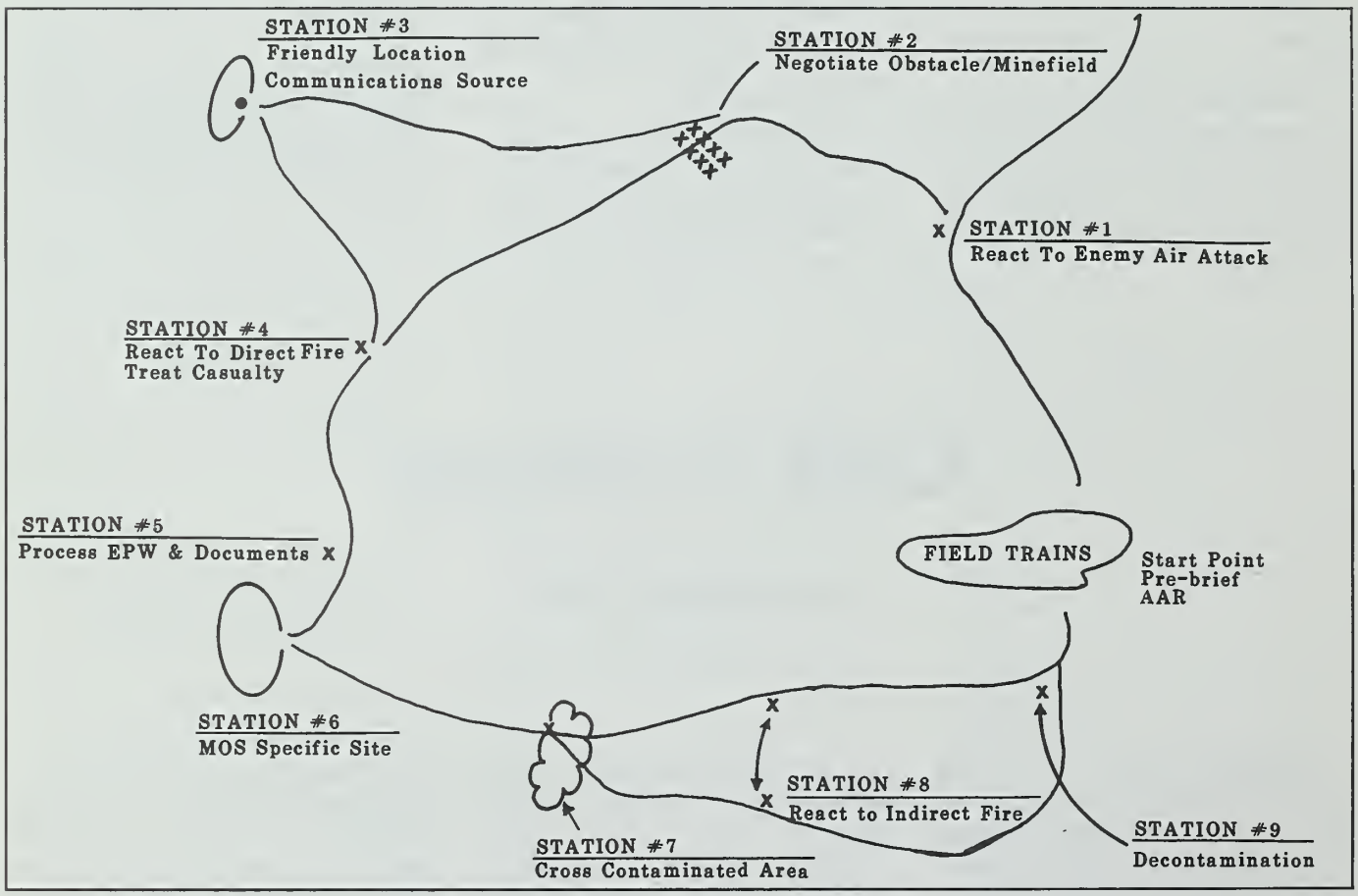
The key to making sure CSS elements will be able to complete their mission under combat conditions is to train individual crews to become proficient in independent reaction skills before the task force moves to the field. This can be done by developing a situational training exercise (STX) that is tailored to the hazards a particular support element may encounter. Many such situations or exercises can be developed, but all of them should be conducted in the context of a CSS crew's battlefield mission. (A list of events that were conducted during our battalion's last two CSS STXs is shown in Table 1.)

GENERAL TASKS
Defend against air attack.
React to indirect fire.
React to direct fire.
Process enemy prisoners and captured documents.
Evaluate a casualty.
Apply dressing to wounded soldier.
Locate friendly units.
Exchange MOPP gear.
Cross a contaminated area (persistent chemical).
Identify and bypass minefields and obstacles.
SPECIFIC TASKS
MOS specific tasks under timed/adverse conditions.

Table 1

A CSS situational training exercise is usually conducted at battalion level and has three purposes—to provide CSS crews with challenging, standardized training; to evaluate them on their reactions to selected daytime and nighttime situations; and to give specialty platoon leaders and supervisors an opportunity to observe their crews' abilities.

A course road can be developed that replicates the distance a crew may have to travel to accomplish its mission—for example, in the battlefield recovery of a forward element under fire a crew may travel 25 kilometers round trip (see sketch for a sample course). Crews are given mission-type orders and supporting graphics that require them to move along a pre-determined course. Several stations, or situations such as those listed in Table 1, are placed ahead of the crew's movement to provide an appropriate stimulus for reaction. Each crew is then evaluated on its response and the effect of that response on the completion of the overall task. Crew evaluators (CEs)—usually line company executive officers or officers from the battalion's S-3 section—follow a crew throughout the course, taping radio transmissions (if appropriate) and providing comments for debriefing



Sample course road for CSS STX.

the crews in the after-action review.

Other scenarios with different tasks can be used, of course, so long as they expose crews to realistic situations, assess their reactions and subsequent actions, and critique their performance. The standards for these evaluations are taken directly from ARTEP 71-2, FC 17-16-2 (Company Maintenance Team ARTEP Mission Training Plan), and FC 71-7 (LOG STX). The standards listed in FC 17-16-2 were adapted by our battalion to fit other evaluated CSS elements (Table 2).

Situation test courses should be established to look like the situation being replicated, and crews should negotiate a course under an initial predetermined scenario (mission briefing) such as the following:

Move forward to (grid location) vicinity BP 1 to (task) evacuate a casualty. HIND helicopters have been sighted operating in the task force's sector. Forward elements have reported small enemy patrols penetrating the FLOT. The enemy has employed chemical weapons and is expected to continue to do so. Standing operating procedures are in effect. Here are your graphics and your call-sign information. You must reach your destination before EENT.

COURSE PARTICIPANTS

Communications section.
Company supply.
Transportation section (support platoon).
Fuel section (support platoon).
Company maintenance sections.
Battalion recovery section.
Medical platoon.
Mess teams.

Table 2

With that, the crews (or a combination of support vehicles) move out along the designated main or alternate supply route.

A course can be supported with low-cost training aids such as a HIND silhouette mounted on a SAAB device with hostile fire devices attached; actual and simulated enemy troops (targets); decontamination markers; obstacle and barrier materials; and pyrotechnics and blanks for simulating signals, artillery, and direct fire weapons.

The end result of this process is an assessment of a CSS crew's training proficiency in battlefield survival and mission accomplishment. Through the assessment, a crew and its platoon leader or supervisor can schedule future training activities that are designed to strengthen marginal areas of performance and correct weaknesses *before* task force field operations begin and CSS elements are dispersed.

If they are properly trained, CSS crews can meet the constant challenge of providing daily support regardless of adversity. Although they alone cannot win battles, they can certainly help prevent defeat.

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Personal Reconnaissance

CAPTAIN JOSEPH L. VOTEL

AirLand Battle doctrine places great emphasis on reconnaissance operations, which are often conducted to support other operations such as a defense or an attack. Scout platoons are organized to conduct these operational missions, but there is another form of reconnaissance that is equally important—the personal reconnaissance conducted by leaders as part of their troop leading procedures.

In a personal reconnaissance, a leader gathers information from a variety of sources, including his own visual observation, and uses this information to change or complete a tentative plan made earlier. Through a personal reconnaissance, a leader gains information about the enemy and also a clear picture of the terrain over which he will fight. This type of reconnaissance is particularly applicable to small unit leaders at squad through battalion level.

Personal reconnaissance may be the most important combat multiplier a commander or leader has at his immediate disposal. Given the tempo and the challenges of the AirLand Battlefield, therefore, it is vital that leaders develop a technique or process that will help them conduct an effective personal reconnaissance. The methodology presented here can serve as a starting point for such a process at the small unit level.*

In preparing for a personal reconnaissance, a leader should review several key considerations, because the facts and deductions that will result from an analysis of them will probably determine the extent of his reconnais-

**Lieutenant Colonel Rick Rhoades suggested several of the ideas that appear in this article.*

sance. These considerations are the following:

Time Available. Before conducting a reconnaissance, a leader must determine the amount of time he has available for it. A lack of time or a tired leader will affect the extent and quality of the reconnaissance, but the best-laid plans often fail because a leader does not modify his initial plans on the basis of the actual terrain and the enemy situation. Time should therefore be allocated to reconnaissance in every situation where it is practical. And because reconnaissance is a continuous process, time for it should be built into the leader's schedule throughout the troop leading procedures. If only a limited amount of time is available, time spent on terrain reconnaissance will give the leader his greatest payoff.

In deciding how much time he has, a leader must consider the size of the area he needs to reconnoiter and the time it will take him to move to and from the recon site. For example, a light infantry leader will not be able to cover as much terrain as a leader who is mounted. Time must also be allowed for maintaining security and stealth.

Priorities. Because time will often limit a leader's reconnaissance effort, he must place priorities on what he needs to look at, choosing what is most important on the basis of his unit's assigned task and its purpose. Many tasks will compete for the top spot, but there are two ways in which priorities for the reconnaissance effort can be assigned.

The first is to make a detailed study of the tasks assigned to the unit and the purposes to be achieved. A leader can do this by a thorough mission analysis during his estimate of the situation. From this mission analysis, the leader can then decide what the unit's essential tasks are—tasks that are vital to the success of the unit's mission. Thus, a small unit leader must make a clear determination of all the tasks he is responsible for and then make sure the most important portions of the plan are reconnoitered first.

The second way is to analyze and wargame the friendly and enemy courses of action during the estimate process. This will help the leader find the important areas or places for reconnaissance. Detailed wargaming often points to the significance of various pieces of terrain or critical events that will have a great bearing on the successful accomplishment of the mission. By finding these areas or activities before his reconnaissance, a leader can conduct a more effective reconnaissance to confirm or deny his chosen course of action.

A leader then follows his priority list of reconnaissance sites as he conducts his recon, performing the most vital ones first. Then if time becomes available later in the troop leading procedures, he can reconnoiter the other sites on the list.

Personnel Required for Reconnaissance. The smallest reconnaissance element will consist of the leader and a security element. The leader (or leaders) who will be responsible for executing an action at a particular site should certainly participate.

The primary considerations to keep in mind when deciding on the size of a reconnaissance element are security and stealth. Security for a reconnaissance element increases as the size of the element increases. Although a larger element may mean more firepower or protection, it also means the element is more likely to be detected. Stealth must also be maintained, because if a recon party is compromised, the mission itself may be compromised. Larger recon parties trade away stealth and increase their chances of being detected.

The size of the area to be reconnoitered and the time available also affect the number of people in the party. Subordinate leaders and attached element leaders such as fire support officers and engineers are excellent candidates for reconnaissance elements.

Development of a Reconnaissance Plan. An informally developed plan helps a leader conduct a more efficient and effective terrain reconnaissance. A reconnaissance plan should include the following considerations:

- The composition and task organization of the recon element.
- The key facts to be gained from the recon.
- Movement routes to the recon site and the formations to be used.
- The actions to be taken at the recon site release point and any control measures to be used.
- Special instructions to members of the recon element.
- Any special equipment needed.
- Contingency plans—actions on contact; actions if the recon party does not return; the evacuation of casualties.
- Stay-behind surveillance.
- Indirect fire support for the reconnaissance.
- Communication arrangements.
- A plan for withdrawing from the recon site.
- A plan for disseminating the information gathered.

Above all, the plan must be simple and concise. Unit SOPs, if they have been developed for this purpose, can help in the development and execution of reconnaissance plans.

Actions at the Reconnaissance Site. Assuming that the leader has enough time to conduct a physical reconnaissance, he must next decide what happens at each recon site, and this is the most difficult part. If a personal reconnaissance is not thoroughly planned, much time and effort may be wasted.

Studying the terrain and its effect on both friendly and enemy courses of action will provide most of the information the leader needs. A number of questions can be asked to help determine the effect of terrain:

From the enemy's perspective:

- What does the enemy want to do here? Can he do it?
- What obstacles are there to his course of action?
- Does the avenue of approach support his needs?
- Does he have good cover and concealment?
- Can he observe the friendly forces? Can he place effective fires on them? Where is he likely to position his key weapon systems?
- Is this location key or decisive terrain to him?

• What alternative actions are available to him?

• Based upon the reconnaissance, what modifications should be made to the enemy situational template that was developed during the estimate process?

From the friendly perspective:

• Can the friendly unit at this site accomplish its mission? Would other weapons or units be better suited?

• What obstacles are there? Are more obstacles needed? What type? Where?

• Does the avenue of approach support the friendly course of action? What can be done to block this avenue to the enemy?

• Does this terrain offer good cover and concealment for friendly forces?

• Does the terrain allow adequate observation and fields of fire? Where might key weapons be placed to suppress the enemy?

• Is this key or decisive terrain to friendly forces?

• What alternative actions are available to friendly forces?

• What modifications should be made to the friendly course of action on the basis of the reconnaissance?

Along with these military aspects of the terrain, the leader must integrate the military aspects of the weather (visibility, precipitation, wind, temperature) to determine its potential effects on both the friendly and the enemy courses of action. Weather factors often alter terrain and affect the ability of both sides to use it.

By evaluating the enemy factors, the leader can refine the situational templates that were developed during the estimate process. Among the many

items the leader should try to identify are prepared and occupied positions, the location of key weapon systems, gaps and weak points in his positions, fire sacks, and locations for deploying his forces.

An evaluation of friendly factors follows the same flow as enemy considerations in determining whether the reconnoitered area supports the leader's plan. For example, the leader should evaluate the location of key weapon systems, engagement areas, positions for supporting fires, and subunit objectives. The specific task and nature of the operation determines what the leader must consider for friendly factors.

Observation posts that "stay behind" after the reconnaissance can help the leader maintain surveillance on the enemy and can ensure that the best and most current information will be used to execute the plan.

Personal reconnaissance is the commander's key to success on the AirLand Battlefield. To gain the most from it, however, he must carefully analyze the time available, the priorities, and the tasks to be accomplished during his reconnaissance effort.

After action reports from the National Training Center, as well as historical combat examples, consistently point to the need for effective leader reconnaissance. The offensive nature of the AirLand Battle will require that leaders use reconnaissance to gain and maintain the initiative and to help them focus overwhelming combat power on the enemy.

Captain Joseph L. Votel is a tactics instructor at the Infantry School. He previously served as a platoon leader, a rifle company executive officer and commander, and a battalion adjutant. He is a 1980 graduate of the United States Military Academy.

Dragon Assault Position

CAPTAIN KEVIN M. KEATING

Motorized infantry is organized and equipped for, trained in, and committed to the conduct of combat operations that are characterized by high mobility, speed, and the deliberate and conscious choice of a time and place for engaging the enemy. Its primary advantage over light infantry is found in its increased mobility and firepower, both of which must be at their best to achieve success on the highly fluid AirLand Battlefield.

The Dragon fighting position currently found in STP 7-11B1-SM, dated July 1985, as task number 071-317-3307, is not well suited to the rapid and volatile tactical operations needed for the effective employment of a motorized infantry company's 15 Dragon systems.

In an article titled "Using Dragons

Effectively," which appeared in the September 1982 issue of the *Marine Corps Gazette,* Lieutenant D.W. Szelowski introduced an alternate position called the Dragon assault position. While I was assigned to the 2d Battalion, 2d Infantry at Fort Lewis, we tested this position extensively—during our monthly individual Dragon qualification and sustainment training; during continuous tactical operations at Yakima Firing Center in Washington; and during two actual live fire exercises with a total of ten live Dragon missiles. All the results were positive and proved the Dragon assault position advocated by Lieutenant Szelowski to be quite effective and much better suited to the demands of motorized tactics than the currently accepted position.

The Dragon assault position has four basic variations—below ground, standing and kneeling, and above ground, standing and kneeling (Figures 1 and 2). Its construction is simple. Once the site for the position has been selected, prefilled sandbags are dropped into place. The time and the number of sandbags needed to construct each position, as well as the position's specific dimensions, are all dependent upon both the type of position selected and the size of the soldier building it. Construction time averages two hours, however, from start to finish, as opposed to about 15 hours for a Dragon fighting position.

In testing the Dragon assault position, we noted several specific advantages:

It provides more stability. When firing, the gunner rests the tube on the sandbags, which absorb the immediate shock effect of the fired missile (provided the gunner pulls backward and downward on the tube during firing).

The Dragon can be placed into operation more quickly. Since the legs are not used to fire it from this position, all the gunner has to do is pick up the Dragon and begin tracking.

It is easy to camouflage. Since it has a low silhouette and requires that little or no earth be dug at the construction site, it does not need much camouflage.

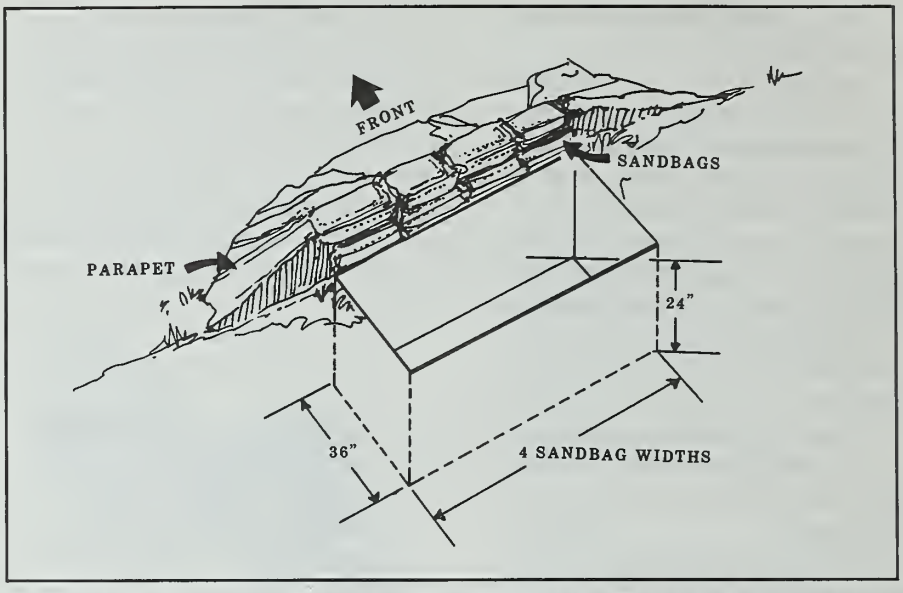


Figure 1. Below-ground Dragon assault position, kneeling. The broken lines indicate dimensions extending below the ground's surface. For a below-ground standing position, a soldier merely digs deeper or builds sandbags higher, or both. The dimensions shown are averages; specific dimensions depend upon both the gunner's size and his preferences.

Additionally, when engaging from the assault position, whether in the standing or kneeling version, the gunner exposes only his head and hands. This gives him more confidence in his ability to engage armored targets successfully. (Although this is a psychological advantage and difficult to measure, particularly under peacetime conditions, it is one that many of the battalion's Dragon gunners noted.)

It is tailored to the gunner by the gunner. The Army now teaches four basic Dragon firing positions—sitting, prone, standing supported, and kneeling supported. Without exception, the gunners in our battalion preferred either the standing supported or the kneeling supported position to either the sitting or the prone position. Since the Dragon assault position is built for either of these preferred positions, each gunner can construct his position according to his personal firing preference.

Less time and energy are required for construction. Because it took one-eighth the construction time of the Dragon fighting position, the soldiers who constructed this position were considerably more rested and ready to fight than those who built the other position.

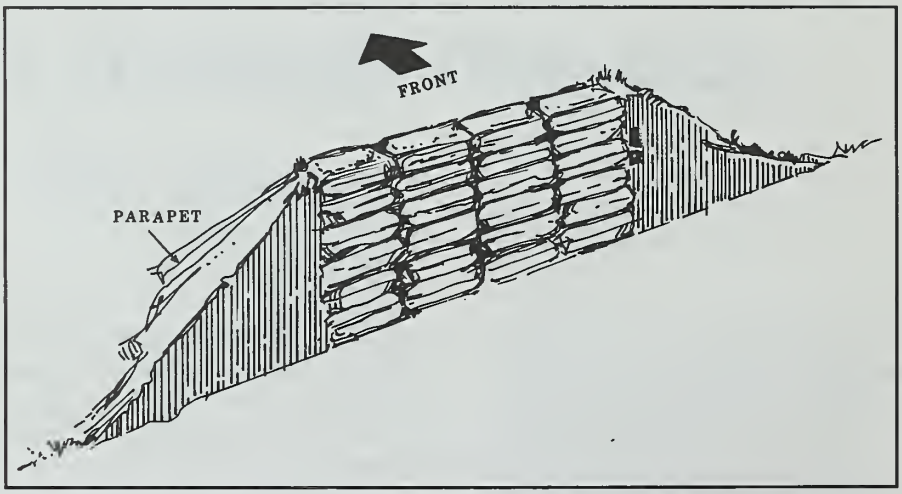


Figure 2. Dragon assault above-ground position, kneeling. For a standing position, a soldier builds up more sandbags.

Additionally, platoons that used the assault position were always prepared to engage the enemy long before their counterparts who had to build a Dragon fighting position.

It can be easily constructed anywhere. Because the assault position can be built by simply stacking up sandbags from ground level and then camouflaging them, the position can be emplaced anywhere—even on solid rock. In our unit, sandbags were filled and then layered on the bed of the M998T HMMWV squad carriers in the assembly area as part of the assembly area SOP. These bags were then used over and over. As a platoon or squad moved into position, it dropped its sandbags off and was almost immediately ready to engage the enemy from covered Dragon positions. Additionally, the platoon leader did not even have to consider the physical composition of the ground. If the gunner could not dig down, he merely built up. He did have to pay closer attention to the camouflage of his position, however, because of its higher silhouette.

During the 2d Battalion's testing of the assault position, some *disadvantages* were also noted:

- The front of the tube must extend unobstructed at least six inches beyond all sandbags and above all camouflage. If it does not, the missile's fins may get caught as they extend when the missile leaves the tube during firing. Although this is a distinct disadvantage, it can be easily overcome with gunners who are well-trained on the proper construction of the position.
- Tracking is limited to about 30 degrees right or left of a neutral position. Our gunners did not find this to be a significant shortcoming, however, in the numerous tracking drills and firings conducted with both the launch effects trainer (LET) and launch environment simulator (LES) systems.

Of the ten live missiles fired from the assault position, only five were hits, but the five misses did not result from a flaw in the assault positions themselves. In fact, only one miss occurred because of gunner error, and all the gunners who fired said they felt very stable while firing. (Three of the misses resulted from improper positioning of the Dragons; specifically, the Dragons were placed so that they were firing uphill and the normal dip in the trajectory of the missiles resulted in their "grounding out." The other miss occurred when the missile wire broke.)

In short, the Dragon assault position has so far proved that it is not only superior to the Dragon fighting position but also far better suited to the demands of motorized infantry. The doctrine for employing motorized infantry exploits its advantages of speed and firepower. On today's highly lethal and volatile AirLand Battlefield, the Dragon assault position provides the commander with a better alternative for the effective employment of his Dragons.

Captain Kevin M. Keating previously commanded a company in the 2d Battalion, 2d Infantry at Fort Lewis and served as battalion adjutant and heavy mortar platoon leader in the same unit. A 1982 graduate of the United States Military Academy, he is now attending the Infantry Officer Advanced Course.

Master Fitness Course

CAPTAIN SAMUEL J. PADGETT, JR.

In an effort to insure the physical fitness of its soldiers over the next decade, the Army did considerable research in developing its present physical fitness program. (See also "Physical Fitness Program," by Lieutenant Colonel Robert J. Hoffman, INFANTRY, September-October 1986, pages 16-19.)

An important part of that overall program is the Master Fitness Trainer (MFT) Course, which is designed to educate and train instructors to help commanders plan and implement constructive fitness programs for their units.

In the four-week course (conducted at the Soldier Physical Fitness School at Fort Benjamin Harrison, Indiana), a trainer receives 169 hours of instruction, including a fitness overview and studies in assessment, program development, exercise physiology, nutrition, lifetime benefits, and physical training.

The nutrition phase, for example, deals with basic nutrition, dietary guidelines, nutrition and physical performance, the dining facility, and weight control. The cardiorespiratory training provides new and creative ways to increase a unit's running capability—Indian runs, aerobics, interval training, ability runs, and circuit training. The physical training portion includes classes in flexibility improvement, aquatics, aerobics, ability group runs, road marching, and strength training.

Two areas—strength training and nutrition—can be used as specific examples of the ways in which MFTs can help commanders plan programs that best suit their units' needs.

One of the key points in strength training is to determine a soldier's one repetition maximum (1RM)—the greatest amount of weight he can lift one time with a certain muscle group.

This must be determined for each muscle group a soldier is going to work on. In using the leg extension machine, for example, a soldier's 1RM is the largest amount of weight he can lift one time with his legs, which may be 190 pounds. Once this 1RM has been determined, a workout program can be developed for him using a certain percentage of that maximum, depending upon his fitness level. Thus, to perform 8 to 12 repetitions on the leg extension machine, this soldier, if he is a beginner, should use 60 percent of his 1RM (114 pounds); if he is "fit," he should use 70 percent of his 1RM (133 pounds); or if "very fit," 80 percent (152 pounds).

If a soldier is looking for muscular *strength* in a particular muscle group, he should work with 75 to 100 percent of his 1RM for that group and do 1 to 8 repetitions. For muscular *endurance,* he would work with 50 to 74 percent of his 1RM for 12 to 20 repetitions. A good balanced program, however, will generally be from 60 to 80 percent of the 1RM for 8 to 12 repetitions. To improve, a soldier has to gradually increase both the weight and the intensity (progression). The 1RM should be retested about every four weeks to reflect that improvement. (For information on one battalion's program, see "Strength Training," by Lieutenant Colonel Robert M. Hensler, INFANTRY, November-December 1987, pages 36-38.)

When it comes to weight control, a dominant theme in the Army for some years, a Master Fitness Trainer can give a commander guidance on it. Soldiers, too, want to know what they should eat and how much of it to achieve a desired result. The usual advice is, of course, to eat a variety of foods, including adequate starch and fiber, to avoid saturated fats and cholesterol, and to limit sugar, sodium, and alcohol. But the MFT can help educate the soldiers on what is involved in following this advice. And he can help decide what an overweight soldier's caloric intake should be on the basis of his current

weight, his age, and his activity level.

To qualify for the Master Fitness Trainer Course, a soldier must be in the rank of staff sergeant through sergeant major for enlisted personnel, second lieutenant through captain for officers; should have a minimum score of 250 on the Army Physical Fitness Test (APFT); and if over 40 years of age, must be medically cleared to take the APFT. A minimum GT score of 105 is recommended, because this course is academically demanding with a failure rate of 10 percent. Additionally, all soldiers should have 18 months retainability and meet the height and weight standards of AR 600-9. It is recommended that students also be non-smokers.

The Army Physical Fitness School has revised the old daily dozen of conditioning drills one, two, and three of the 1970s and has designed programs that increase flexibility, cardiorespiratory endurance, muscular strength, and muscular endurance. The Master Fitness Trainer Course is now setting the standards by getting the Army fit for the 1990s.

Captain Samuel J. Padgett, Jr., has served as a senior platoon trainer for the Infantry Officer Basic Course since he completed the Infantry Officer Advanced Course in 1985. He completed the Master Fitness Trainer Course in December 1987. He holds a master's degree from Central Michigan University and has written several articles for publication.

SWAP SHOP

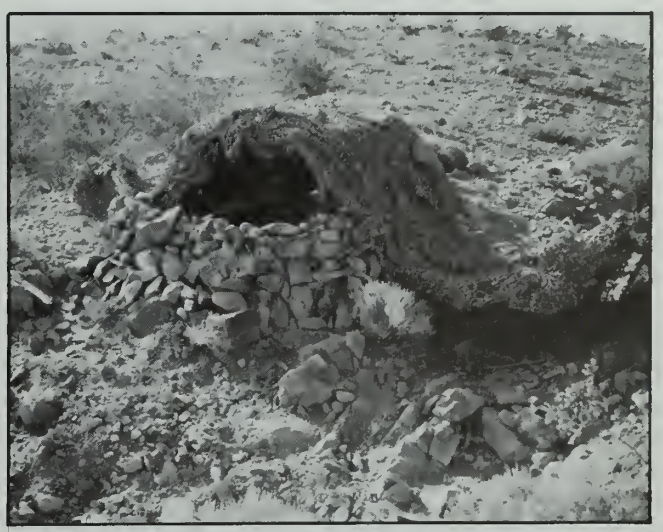
The TOW cap was designed some years ago to protect TOW squad members on the M113A1 carrier from artillery and mortar fragmentation. The cap consists of four nylon ballistic blankets weighing about 200 pounds. The other components, the yoke and the base channels, provide the support and frame for ground mounted operations.

During a wargaming session in the 1st Battalion, 5th Cavalry, Lieutenant Steven Brooks, a platoon leader in Company E (the battalion's TOW II antiarmor company), came up with the idea of using TOW caps to cut down on the time required to put in proper TOW dismounted fighting positions.

Although TOW caps are now obsolete in the Army's inventory, some were found at the Red River Army Depot, Texarkana, Texas, and the U.S. Army Missile Command gave permission for the release of the TOW caps to Company E for training. Battle drills and load plans for the company's M901A1s were revised to accommodate them.

The soldiers did not like the caps at first, but considered them irreplaceable once they realized the time the caps saved over filling sandbags. And when the camouflage net is dropped in the back, the position blends in with the terrain remarkably well. Company E trained with the TOW caps for five months at Fort Hood before employing them successfully at the National Training Center.

The TOW cap is by no means the "school solution," but it is a useful technique and one that should be kept in mind.



(Submitted by Captain J. Karl Clark, Company E, 1st Battalion, 5th Cavalry, Fort Hood, Texas.)

PAST TIMES

EDITOR'S NOTE: The following is another in our recurring series of articles reprinted from previous issues of INFANTRY and its predecessors, the INFANTRY SCHOOL QUARTERLY and the MAILING LIST. This article first appeared in the MAILING LIST, Volume III, 1931-32, pages 71-83.

The author was a graduate of the 1930-31 Advanced Class of the Infantry School. He had served as either a troop commander or a staff officer with front-line troops on the Eastern and Western Fronts and in the Ukraine and the Caucasus during the entire period of World War I. He had been wounded four times and had been awarded the Iron Cross.

Battlefield Psychology

CAPTAIN ADOLF VON SCHELL, GERMAN ARMY

Psychology, as I understand it, means knowledge of the soul. Yet, how shall we speak about the soul of others, when we do not even know our own souls? Is there anyone among us who, with absolute certainty, can say how we will react to a given event? But we as soldiers, especially as leaders, must have some knowledge of the soul of our soldiers, because the soldier, the living man, is the instrument with which we have to work in war.

The great commanders of all times had a real knowledge of the soul of their soldiers. Let us, however, using a more simple phrase, call this knowledge of the soul "knowledge of men." Knowledge of men in all wars of history was an important factor for the leader. It is probable that in future wars this will be still more the case. Prior to the World War, all armies fought in comparatively close order. The psychological reaction of the individual soldier was not so decisive; the fighting was done, not by the individual, but by the mass, and the mass was held together by drill and discipline. In addition, the psychological impressions of the battle were simpler. Rifle and cannon ruled the battlefield, and the enemy could be seen. In modern war, the impressions, however, are much more powerful. We generally have to fight against an enemy whom we cannot see. The machine rules the battlefield. Now we do not fight in great masses, but in small groups, often as individuals. Therefore, the psychological reaction of the individual has become much more important. We as commanders must know how the individual will probably react, and we must know the means by which we can influence this reaction.

The knowledge of men is especially difficult for two reasons: first, because it cannot be learned from books; second, because the individual of peacetime is a changed man in war. He reacts differently to events in war than he does in peace, and must, therefore, be handled differently in war. For this reason we cannot learn, in peacetime, the psychology of war. It is my belief that no one in the world can give you a prescription for a correct application of the principle of psychology in war. The only thing of which we are certain is that knowledge of men is always especially important, and that no commander without this knowledge of men can accomplish great things.

As long as armies were small and the battlefield narrow, a leader could exert a psychological influence on his army by personal example. In modern wars, however, the high commanders are necessarily far in the rear at a general headquarters, and the majority of soldiers never see them. Consequently, the tasks of influencing the men psychologically and of understanding them have passed, in a large measure, to subordinate commanders. For this reason it is better today to deal only with the psychology of individuals and small units.

We must always think of these matters, and in peace we should do everything possible to prepare the minds of our soldiers for the strain of battle. We must repeatedly tell them that war brings with it surprise and tremendously deep impressions. We must prepare them for the fact that each minute of war brings with it a new assault on their nerves. We as soldiers of the future should fully realize that we will

be faced in war by many new and difficult impressions, because dangers that are known and expected are already half overcome.

Let us take several examples from war and see what we can learn from them. In considering them, however, certain facts should be kept in mind. These examples do not constitute a formula for knowledge of men, because they only deal with German soldiers; moreover, they deal only with particular German soldiers in certain definite situations. Whether other soldiers of other races would react similarly in similar situations, I do not know, but I believe that they would not. The mentality of the American soldier is certainly quite different from that of the German soldier; and even in America, the soldier from the North is quite different from the soldier of the South. A soldier from the city of New York is surely quite different from a soldier who has lived as a farmer in the Middle West. He will therefore react differently and will require a different method of handling.

EXAMPLE

During the battle of Tannenburg, Hindenburg, Ludendorff, and their staff were standing on a hill and observing a portion of the battlefield. While so engaged the well-known Colonel Hoffman, who was at that time G-3, came up to a young captain of the General Staff and said to him in a quiet tone, "My friend, you seem to have nothing to do. Pay attention; in the village of X there is a Landsturm battalion. Call up its commander and say to him, 'A Russian cavalry brigade has made a deep penetration in the direction of the village of X. The Landsturm battalion is to counterattack and throw back the Russians.' "

On hearing this the young general staff officer became quite excited, and said, "Oh, Colonel, that old Landsturm battalion, which consists only of old men over 45 years old, cannot defeat a Russian cavalry brigade."

The Colonel answered, "Merely give him that order quietly and if the battalion commander refuses to obey, ask him for his name and you will see that he will do it instantly."

The young captain gave the order over the telephone and the battalion commander, terribly excited, answered, "How can I attack a Russian cavalry brigade with my old men? That's impossible."

Then the captain said, "I have been directed, if such be the case, to merely ask you for your name."

"Oh, me," came the quick reply, "I did not mean it that way; certainly we will attack. I will have my unit forward at once, and in five minutes will be on the march. Your orders will be executed immediately."

And they were.

The fear of unpleasant consequences resulted in the disappearance of all of this commander's fears. With another battalion commander in different circumstances, the effect would probably have been entirely different. Colonel Hoffman had correctly estimated the probable reaction of this battalion commander.

A really classic example of this art of estimating a situation psychologically was shown in 1917 by a brigade commander. This General said, "Each of our three regimental commanders must be handled differently. Colonel "A" does not want an order. He wants to do everything himself, and he always does well. Colonel "B" executes every order, but has no initiative. Colonel "C" opposes everything he is told to do and wants to do the contrary."

A few days later the troops stood in front of a well-entrenched enemy whose position they were to be required to attack. The General gave the following individual orders:

To Colonel "A" (who wants to do everything himself): "My dear Colonel 'A', I think we will attack. Your regiment will have to carry the burden of the attack. I have, however, selected you for this reason. The boundaries of your regiment are so and so. Attack at X hour. I don't have to tell you anything more."

To Colonel "C" (who opposes everything), "We have met a very strong enemy. I am afraid we are not able to attack with the forces at our disposal."

"Oh, General, certainly we will attack. Just give my regiment the time of attack and you will see we will be successful," replied Colonel "C".

"Go, then, we will try it," said the General, giving him the order for the attack, which had been prepared some time previously.

To Colonel "B" (who must always have detailed orders) the attack order was merely sent with additional details.

All three regiments attacked splendidly.

CORRECT ESTIMATE

The General knew his subordinates; he knew that each one was different and had to be handled differently in order to achieve good results. He had estimated the psychological situation correctly. It is comparatively easy to make a correct estimate if one knows the man concerned; but even then it is often difficult, because the man doesn't always remain the same. He is no machine, and his reaction to certain events may be one way today and another tomorrow. Soldiers can be very brave today and tomorrow be afraid. I will give you an example from my own experience to illustrate this point.

It was the end of September 1914, just when trench warfare was beginning. We were on the Chemin des Dames. One night I, with a few men, made a patrol toward the French lines which lay a few hundred meters to our front. It was very dark, very hot, and very quiet. Suddenly I stepped on something which gave way under my weight. To determine what it was I bent down and touched it with my hand. I touched something which clung to my fingers. I could see nothing. Then I flashed my pocket lamp and saw that I had stepped on a Frenchman who had been dead for some time and whose body was disintegrating. He appeared

blue. I had touched his face and his beard had come off in my hands. I was so terrified that I ran to the rear and was unable to go out again that night in front of the trenches. I was really terrified and cowardly. This cowardice was the result of merely touching and seeing a dead man. Who can give the reasons? It was an unexplainable psychological reaction.

In September 1915, a similar thing happened to which I reacted very differently. On 13 September 1915, we had attacked the Russians and beaten them. It had been a very hard battle and we had suffered severe losses. Now night had come. It was rather cold. I found a hole in the ground sheltered with some boards, in which, however, a severely wounded Russian was lying. His bleeding intestines were hanging from his torn body. So as not to get dirty I put a blanket between us and soon went quietly to sleep. The next morning the Russian was dead. I had spent the night with a dead man in a hole. I now noticed that the dead man was still holding a piece of bread in his hand. As I was very hungry, I took this bread and ate it.

You see, therefore, that the same man reacts differently to similar events under different conditions.

HUMAN BEINGS

Let us now try to learn something from the examples that have just been given. We have to lead soldiers in war who are not machines but human beings. Each one of them reacts differently, therefore each must be handled differently. Furthermore, each one reacts *differently* at *different* times, and therefore, must *each time* be handled according to his particular reaction. To feel this is the art of the commander. It is the psychological estimate of the situation.

Now with regard to other matters. We who have been in war know that the hardest thing we had to do was to lie quietly under hostile fire and wait for an attack. Why?

When a soldier lies under hostile fire and waits, he feels unable to protect himself; he has time; he thinks; he only waits for the shot which will hit him. He has a certain feeling of inferiority with regard to the enemy. He feels that he is alone and deserted.

I remember one day in 1916 in Russia. During the night we had relieved the Austrians. On the following morning the Russians began a strong artillery preparation. We did not know the terrain; we did not know what troops were on our right and left; we did not know what artillery we had. With my own company alone, I was in the midst of an Austrian battalion. I did not know my superiors. The Russians had already been firing for hours, but no shots came from our own artillery. I went constantly from dugout to dugout to see my men and speak with them. They should at least see that they were not alone. Repeatedly they asked me, "Are we really entirely alone here; haven't we any artillery?" It continued this way for hours. Our telephone wires had been shot to pieces. Finally a tremendous noise came from the rear. Our own artillery was firing. At once high spirits returned. The soldiers did not now feel deserted. Each could see and hear that we, on our side, were doing something. Each saw that he was being supported, and that everyone was ready to repulse the attack. In great defensive battles one will constantly hear the remark, when the enemy artillery is firing, "Where is our own artillery?"

It was the same with our aviators. If a hostile flyer was over us for merely ten minutes, the soldier would begin to question, "Have we really no flyers? Where are our flyers?" If our antiaircraft guns then began to shoot at the hostile aviator, the soldier at once became satisfied; he saw that they were doing something.

It is different during the attack. Here the soldier himself does things; he has something to do; he moves forward and he fires; he assaults and dictates the action of the enemy. He never questions at the moment of the attack, "Where is our artillery?" In the attack he feels himself, from the beginning, as victor; he storms forward. He believes he can do everything by himself; he needs no support. As soon as the attack slows down, the cry for artillery is heard again.

It was February 1917 in the Carpathian Mountains. My company was in position at the top of a high mountain which controlled the terrain in all directions. In places, the Rumanians were only 20 meters away. One day we were surprised by an enemy attack and pressed back to the edge of the top of the mountain. A very difficult hand-to-hand fight took place with bayonets and hand grenades which lasted about an hour. Finally we succeeded in pushing the Rumanians down the mountain. Inasmuch as I had seen the artillery observer, who had been in my trench, fall at the very beginning of the fight, I had the feeling, during the entire time, of having fought alone with my company without any support by the artillery. In consequence I called our regimental adjutant on the telephone and complained that the artillery had not helped us. The battery commander concerned, whom I knew very well, soon afterward came to me and told me that his battery, during the fighting, had fired about 300 rounds in my support; that is, about five rounds every minute. I had not heard one of them. We had fought, acted, and in the excitement of the fighting I had not noticed at all that our artillery was firing.

OWN DESTINY

This being able to act is, in my opinion, the reason why soldiers go so willingly on patrol. I repeat that to lie in hostile fire and wait is very difficult, because one feels exposed to blind chance. One can only wait but can do nothing. On a patrol it is very different. The soldier has the feeling that he has his own destiny in his hand. He feels that he is not dependent on blind fate, that he is not forced to go this way or that, but can himself decide what to do. He feels that he is himself ruler of the situation. For example, he may have this feeling: "That path over that hill seems to me to be dangerous; I do not know exactly why, but I have that feeling very definitely; therefore, I prefer to go through the valley."

He has the feeling that his action depends on his own will, and in consequence he can act in accordance with that will.

Here are two examples to show that this feeling of security is a decisive factor. It is not a question whether security actually exists.

It was a few days after the events on the Chemin des Dames in September 1914. We were on a hill near Berry au Bac. At our immediate right was a road and a canal leading down to Berry au Bac which was occupied by the French. On this road there was a small stone house. One day I happened to be in this house in which I had placed a picket of five or six men to guard the road. Suddenly the French began to fire on the house with heavy artillery. A shell came every minute. Everyone knows that these single shells are much more unpleasant than a barrage, because one has time to wait and think. The first shell fell about 50 meters short; the second, about 100 meters long; the third, also was short; then one arrived which was close to the house.

I noticed that my men were rather uneasy; they were now waiting for the shell which would fall in the middle of the house. I could not leave my men at this minute, although my place was really not there. So we waited together. This waiting and this uncertainty made us nervous. We sat in the house and listened for every shell which came. We could tell exactly whether it was too short or too long, or whether it would fall to our right or to our left.

Finally the following thoughts began to form in my head: "The walls of this house are very thick, in fact about a yard. If a shell bursts outside the house and we are in it, nothing can happen to us. If, however, a shell bursts in the house, then it would be better to be outside it. Therefore, the best thing to do is to sit in the door and watch the shells. We can hear where the shells are going, therefore, we will be in a position to go either into the house or out of it." So I sat down on a chair in the door and was soon perfectly satisfied—so satisfied, in fact, that I went to sleep. This action on my part calmed my men to such an extent that they began to play cards. After a few hours the firing ceased.

You may, perhaps, laugh at my action in this case. I also am ready to laugh at it. The conviction which I had at that time was nonsense, for one cannot decide whether a shell will land three or four yards to the right or to the left. I have only mentioned the point to illustrate that it is not a question of whether the security is real, but of whether one has the feeling of security.

Still another example. It was August 1916. The great Russian offensive under General Brusilov had thrown the Austrians far to the rear. We were brought up by rail and then approached the front in rapid marches so as to help the Austrians. For a few days we bivouacked in a forest behind our artillery. Then one night, we moved up close to the front as a reserve and were scattered over the terrain by companies. As we did not know anything about the terrain, an Austrian noncommissioned officer conducted the company to the front in the darkness. Arriving at a very large shed, we halted. We were happy to have a roof over our heads and slept until morning.

When it became light, I saw that this shed was entirely in the open and was located about 200 meters from an Austrian battery. This placed us in such a position that, if the Russians began firing at this battery, we would be right in the middle of their concentration. Furthermore, I could see a Russian observation balloon, therefore, we could not move out of our shed. My fears were soon confirmed; the Russians began to fire on the Austrian battery with heavy artillery. One of every three or four shots fell short and burst very close to the shed in which my company was lying in close formation. So long as it was light, or so long as the Russian balloon stayed up, we could not move.

The shells continued to fall around our shed. No one said a word. I noticed that my men were exceptionally nervous. Several men came and asked permission to go outside, giving more or less trivial excuses. I refused, for it was clear that they only wanted to reach a place of safety. The nervous excitement was intense. Suddenly a shell came down right in the middle of the company, but it did not burst. The men became now even more nervous. We were like a kettle which would soon boil over.

In order to obtain a feeling of security somebody had to act. Then I had a good thought; I called the company barber and sat down in front of the shed with my back toward the front and told him to cut my hair. I must now say, that in my whole life, no haircut has ever been so unpleasant. Every time a shell whistled just over our heads, and I jerkily pulled my head down, the barber tore out a few hairs instead of cutting them. But the effect was splendid; the soldiers perhaps had the feeling that if the company commander let his hair be cut quietly, the situation could not be so bad, and that they were probably safer than they thought they were. Soon conversation began in one group or another; a few jokes were played; a few men began to play cards; someone began to sing; and no one paid any more attention to the shells, even though a few minutes later, two men were wounded by a shell which struck in the vicinity.

TWO POINTS

Now, what can we learn from this? Two points stand out:

Give the men a feeling of security; by doing so you can easily help them to overcome their impressions.

Do something to induce action among your men. If they have been a long time on the defensive, send patrols out, even if there is no special reason for patrols.

This patrolling gives the men a feeling of self-confidence and superiority. I had, for a long time during the war, a regimental commander who demanded that each night one patrol from each company go out. Each was required to come back with clear-cut evidence of its activity. There had to be either a prisoner or a piece of hostile wire. Soon there was a regular competition among the companies. Everyone wanted to go on patrol.

In the German army we have what we call "mission tactics"; that is, orders are not written out in the minutest detail, but a mission is merely given to the commander. How he shall carry it out is his own problem. This is done because only the commander on the ground can correctly judge existing conditions, and is thereby able to act correctly if a change in the situation occurs.

There is also a very strong psychological reason for these "mission tactics." The commander, who can decide for himself within the limits of his mission, feels that he is responsible for what he does. He will, consequently, do more and be more successful, because he will act as his nature requires in accordance with his own psychological individuality. Give this same independence to your platoon and squad leaders. You certainly know from training in peace that the more independent a group or platoon leader is in his training, the better the result is. Why? Because he can act in accordance with his own personality, which he knows best of all.

A few more examples at random will illustrate other aspects of this interesting subject of soldier psychology.

In August 1914, we marched singing through Belgium toward Liege. It was a beautiful morning; we were young, healthy, and we had the feeling of power and strength. On the road we saw the first dead. Singing ceased. Soldiers gazed at their dead comrades. The seriousness of the war suddenly appeared before their eyes; perhaps they, too, would soon lie dead by the edge of the road. Absolutely quiet, the company marched on. Then suddenly someone called to a dead man, "Seems to suit you to sleep; get up, it is breakfast time." All laughed. The seriousness of the moment had vanished in a joke. High spirits returned.

ATTACK

It was 1917. The battle of Cambrai. A lieutenant with 20 men was defending a little piece of woods. He repulsed several attacks. Another attack commenced. Only a few Germans could continue the fire. They were out of ammunition. What should be done? The lieutenant commanded, "Fix bayonets, attack, hurrah." The 20 men attacked. Eighty English soldiers were taken prisoners. Why did the English surrender? Why didn't they merely laugh at the 20 Germans who were attacking?

February 1917. It was in the same close combat on the mountain peak in the Carpathians previously described. Fighting had lasted an hour. We had not been able to drive the Rumanians back. In one place about six men were fighting. In their midst was a noncommissioned officer. Suddenly the noncommissioned officer was shot dead. One of his men jumped up. "The Rumanians have killed our corporal," he yelled, and charged into the midst of the enemy, knocking several of them down. The Rumanians ran to the rear, the Germans after them. In five minutes we recaptured the mountain peak.

In both these last cases we have examples of unexpected acts which, through their surprise effect, brought success. One cannot teach these things in peace. One can never say in such and such a decision in peace that it is the correct one. In both of the above cases it was the moral impression which was the decisive factor.

We know that psychology is tremendously important in war. It is a field unlimited in extent, to which every conscientious soldier should give much time and study. Yet it cannot be *learned* as one learns mathematics. It must be *sensed.* Unfortunately, we cannot formulate a set of rules, because it deals with human reactions which cannot be reduced to an exact science. War is governed by the uncertain and the unknown. The least known factor of all is the human element.

ENLISTED CAREER NOTES

INFANTRY ANCOC

The Advanced Noncommissioned Officer Course (ANCOC) is critical to the professional development of Infantry NCOs. Current policy requires that an NCO complete ANCOC before he can be selected for promotion to master sergeant.

There is a long waiting list for CMF 11 ANCOC attendance, and the number increases each time a selection board meets. The Infantry School recently increased the number of training seats available for Active Army NCOs in Fiscal Year 1988, and Infantry branch cannot afford to waste a single seat. Commanders must therefore make every effort to ensure that their NCOs attend ANCOC at the earliest opportunity.

ANCOC FOR DETAILED RECRUITERS

The policy concerning ANCOC attendance by detailed recruiters has been modified, and these NCOs will attend as follows:

- SFCs in primary or secondary zones for promotion to master sergeant who have 36 months or more in the U.S. Army Recruiting Command (USAREC) will be released early to attend ANCOC, on temporary duty (TDY) enroute to their next duty stations.
- SFCs with less than 36 months time in USAREC and in the primary or secondary zone for promotion to master sergeant will attend TDY and return.
- SSGs who are selected for ANCOC will attend TDY enroute to their next duty stations after completing 48 months in USAREC.

This policy will ensure that detailed recruiters remain competitive for promotion to master sergeant and that they receive ANCOC training as close as possible to the time they need it.

11M NCO DEVELOPMENT

Noncommissioned officers who hold MOS 11M (BIFV Infantryman) should consider enrolling in one of the three 11M development courses currently available.

Since the initiation of MOS 11M, it has become one of the most demanding positions for an NCO to hold. A BIFV squad leader has functional responsibility for the training and successful deployment of his squad. To accomplish this he must master all phases of training and exercise proper maintenance of the BIFV.

The three courses available are the following:

Bradley IFV Gunner Course. This four-week course trains soldiers to proficiency in turret weapon operation and maintenance and develops the gunnery skills a gunner needs to acquire and defeat threat targets.

The prerequisites are:

- Active Army or Reserve Component.
- Qualified in MOS 11M or 11B.
- Assigned to or on orders to an 11M20 position.
- Nine months or more of active service remaining after course completion (for active duty personnel).

Bradley Commanders Course. This six-week course, formally called the IFV Course, teaches the maintenance, gunnery, and tactical skills required of a vehicle commander.

The prerequisites are:

- Active Army, assigned to or on orders to an IFV-equipped unit.
- Nine months of active service remaining after course completion.
- In the rank of SSG or SFC/PSG or in duty position as a vehicle commander.
- MOS 11B qualified with no prior MOS 11M training.
- No IFV new equipment training.
- Potential for duty as an IFV commander.

IFV Master Gunner Course. This 12-week course includes instructions on how to implement gunnery training programs with the emphasis on IFV tactical employment skills and maintenance of the turret and fire control equipment.

The prerequisites are:

- Active Army only.
- MOS 11M20 qualified.
- SSG or SFC/PSG recommended by battalion commander.
- Eleven months time in service remaining.

Noncommissioned officers who have been alerted for overseas assignment should consider attending one of these courses enroute to their next duty station. Likewise, NCOs who are currently overseas and have known dates for return should consider applying.

Anyone who is interested should submit a DA Form 4187 (Personnel Action), current DA Forms 2A and 2-1 (Personnel Qualification Record), and a DA Form 2635 (Enlisted Preference Statement) for future assignment considerations. Personnel Administration Centers can provide assistance in completing the application.

Further information is available from Commander, TAPA, ATTN: DAPC-EPK-I (SFC Crivello), 2461 Eisenhower Avenue, Alexandria, VA 22331-0452.

FORCE ALIGNMENT BRANCH

Several functional responsibilities within TAPA have been transferred to the new Force Alignment Branch in the

Enlisted Personnel Management Directorate. This transfer consolidates force alignment actions for applications by the directorate.

These functions include:

- The Enlisted Bonus, Selective Reenlistment Bonus, and Bonus Extension and Retraining Programs.
- Special and incentive pay programs (Career Sea/Career Sea Premium, Diving Duty, Demolition Duty, Experimental Stress, Flightcrewmember/Non-crewmember, Toxic Fuel and Propellants, Toxic Pesticides, Overseas Extension Incentive, Foreign Language Proficiency, Special Duty Assignment).
- Army Board for Correction of Military Records cases referred for TAPA recommendations involving the above monetary incentives.
- Sergeant through sergeant first class monthly promotion recommendations.
- Military occupational specialty reclassification (IN/OUT) calls.

The Force Alignment Branch will monitor the alignment of the enlisted population and the effectiveness of the management tools the Army uses to align the force.

When necessary, the branch will recommend ways to alter or apply these tools to make them as responsive as possible to anticipated changes in Army requirements. Such recommendations will be made in coordination with the career branches and the TAPA office of the deputy chief of staff for plans.

The office symbol of the Force Alignment Branch is DAPC-EPT-B; telephone AUTOVON 221-4179, commercial (202) 325-4179.

STANDING PROMOTION LISTS FOR 11Ms

Commanders should review their standing promotion lists for 11M soldiers to ensure that eligible personnel are being boarded. In December, for example, more 11Ms could have been promoted both to sergeant and staff sergeant if the names had been there.

The quotas were there, but the standing lists were not sufficient. As a result, an opportunity to promote Infantry soldiers was lost. And in the future, with the impending budget and personnel cuts, the opportunities to promote these soldiers could be curtailed.

RE-ENLISTMENT OPTIONS

Soldiers will have an opportunity to take advantage of new re-enlistment options as part of a test that runs from 1 March through 30 July 1988:

- A soldier who elects to re-enlist for an Army service school for retraining will be given an opportunity to select his next duty assignment before re-enlisting, provided he re-enlists for six years.
- A soldier may select either a stateside assignment or an overseas area assignment of choice based on his new military occupational specialty.
- A soldier who re-enlists for current station stabilization of 12 months or more may elect a choice of assignment following the completion of the stabilization. This option carries with it a five-year re-enlistment for soldiers who choose a 12-month stabilization. Those who choose a stabilization period of more than 12 months and up to 18 months will be required to re-enlist for six years.
- A soldier who re-enlists for an assignment in a short-tour area such as Korea, and who re-enlists for five years, will be able to select his new stateside duty station upon completion of the tour.
- Beginning March 1, first term soldiers who enlisted for two years may re-enlist for three, four, five, or six years if they elect one of the options listed above.

Other re-enlistment changes went into effect on 29 December 1987.

- A mid-career soldier who is within eight months of his ETS and has received CAP III assignment instructions may request deletion from this assignment provided he agrees to re-enlist for six years with a minimum stabilization of 12 months if stateside and 24 months if overseas, and if he serves in a short or balanced MOS.
- Soldiers overseas may elect stabilization in monthly increments between 12 and 24 months.
- Some re-enlistment options now carry longer re-enlistment periods. Soldiers who re-enlist for retraining at an Army service school that is more than eight weeks long must now re-enlist for at least four years.
- Soldiers who re-enlist for assignment to a long-tour overseas area must re-enlist for five years or more. Those who elect an assignment to a short-tour area must re-enlist for at least four years.
- The language school re-enlistment option now requires a minimum re-enlistment of four years.

TRANSITION INTO RESERVE COMPONENTS

It is no longer Army policy to merely separate soldiers from the active component upon completion of their active duty obligations. Current policy encourages the transition of eligible soldiers into the Reserve Components so that they can continue to serve as members of the Total Army.

Service in the Reserve Components may be in the Individual Ready Reserve (IRR); the U.S. Army Reserve (USAR); or the U.S. Army National Guard (ARNG).

Pretransition counseling is provided to all soldiers about 90 days before their release from active duty. This counseling is conducted on each installation by Total Army Career Counselors for all soldiers (but principally enlisted). Subject matter includes the soldier's remaining obligation, RC pay and benefits (SGLI, commissary and post exchange privileges, and the like), availability of assignments in the RC, and retirement potential.

The goal of the program is to provide the Reserve Components (especially its Troop Program Units) with experienced soldiers who are current on doctrine and training techniques. This will serve to increase readiness while reducing training costs.

OFFICERS CAREER NOTES

FORCE ALIGNMENT PLAN AND BRANCH DETAIL

The Force Alignment Plan (FAP) III and Branch Detail Programs are two key management tools that are used to realign the officer inventory between branches to meet the need for lieutenants and captains in each branch. FAP III has been in existence since 1984, while the BD program was effective with the accession year group for Fiscal Year 1987.

Realignment requirements depend upon retention rates, authorizations, year group size, and the projected inventory alignment of each branch. One hundred forty-three Infantry officers were involuntarily rebranched from Year Group 1983. Projected Infantry branch FAP III requirements are: FY 88 (YG 84)—141; FY 89 (YG 85)— 190; FY 90 (YG 86)—142.

Under the BD program, newly commissioned officers will be allowed to select an underaligned basic branch of their choice and be detailed to one of the overaligned branches for three to four years. Upon completion of the detail period, each officer would revert to his selected basic branch. Enough new lieutenants will be identified in the beginning under the BD program to meet realignment requirements for FY 91 when, hopefully, mandatory rebranching under the FAP III program will no longer be necessary.

TECHNOLOGICAL NEEDS

There is a need throughout the Army for officers with educational backgrounds that support the many emerging technologies. The Army is increasingly involved in areas such as robotics, laser physics, plasma physics, ceramics engineering, superconductivity, and others.

Infantry branch needs officers with these skills to provide an Infantry perspective in the analysis process, in research and development, and in the materiel acquisition and management field.

New requirements are rising, and functional areas 49 through 53 (operations research and systems analysis, force development, research and development, nuclear weapons, and systems automation) include an increasing number of important jobs.

Officers who are pursuing degrees on their own should consider these emerging technologies and the technical functional areas.

MEDICAL SCREENING

Active duty lieutenant colonels and colonels who have been selected for battalion and brigade command, regardless of age, must now undergo cardiovascular screening and be cleared by medical personnel before assuming command.

This screening will take place in four phases:

- Phase 1—Risk evaluation and physical examination, blood tests, and resting electrocardiogram.
- Phase 2—Medical exam and stress test.
- Phase 3—Nuclear cardiology/ angiography.
- Phase 4—Medical therapy/bypass surgery.

Officials expect that 50 percent of the commanders will be cleared during Phase 1 screening, 97 percent after Phase 2, and 99 percent after Phase 3.

Although the screening could result in deferment from command for an officer who had been selected, only in the worst case would an officer be removed from the list and not receive a command.

Officers, regardless of age, who are currently in command at the lieutenant colonel and colonel levels will be medically screened as soon as possible. None of them, however, will be removed from command solely because of failure to be medically cleared.

Medical screening of all soldiers aged 40 and over began in 1981 to identify cases of possible heart disease and to improve the overall readiness of the Army. Soldiers 40 and over may not take the Army Physical Fitness Test until they are cleared by appropriate medical authority.

Although the intent of this policy applies to the Total Army, Army National Guard and Army Reserve policy will be delayed pending the complete implementation of the 40 and over cardiovascular screening program into the Reserve Components.

INFANTRY BRANCH REPRESENTATIVE, USAIS

Infantry Branch, TAPA, maintains a permanent liaison officer at the Infantry School. He serves as liaison between the School, Infantry Branch, and major commands in the management of Infantry Officer Candidate School, Officer Basic Course, and Officer Advanced Course officer assignments, military schooling, and career management.

He is the single point of contact for all units for information pertaining to the status of officers attending USAIS classes, follow-on courses for officers attending IOBC or IOAC, and delays of officers because of course failure, slippages, or medical problems.

The current liaison officer is Captain Tim Bunting. He can be reached at AUTOVON 835-3611; commercial (404) 545-3611.

ROTC ACTIVE DUTY ACCESSIONS

The group of ROTC cadets who will be commissioned in 1988 is of very high quality, but only 54 percent of the entire year group was selected for active duty. Of the 5,117 cadets who requested active duty, only 75 percent were selected. More than 95 percent of the 371 cadets branched Infantry had selected it as their first choice, and 51 percent were regular Army. Because so many had chosen Infantry first, the branch will be getting very high caliber officers.

In a change from last year's branching procedures, cadets were branched to meet the captain requirements of each branch. The branches that had excess lieutenants (Signal Corps, Military Intelligence, Military Police, Quartermaster, and Transportation Corps) then detailed them to the underaligned branches (Infantry, Field Artillery, Armor, and Air Defense Artillery). Infantry received 131 detailed officers for a total of 502 officers from the board that met in December 1987.

This branch detail process should eliminate the need for forced rebranching by FY 91.

SPECIAL FORCES REBRANCHING

When Special Forces was officially designated a separate branch in 1987, officers who were being managed using Functional Area 18 and Skill Code 5G were given an opportunity to volunteer for rebranching into Special Forces. The FA 18 officers who volunteered were rebranched; those who did not will have new functional areas designated because FA 18 will cease to exist.

The officers holding Skill Code 5G who volunteered were considered by a rebranching board conducted in November 1987. Those who were not rebranched by the board or who did not volunteer will retain the 5G designator. It is expected, however, that assignment to Special Forces billets will be made from the available pool of Special Forces branch officers.

Almost 1,000 Infantry officers were rebranched into Special Forces through this system during Fiscal Year 1987. Plans are to conduct a rebranching board annually for officer volunteers who have completed or who will have completed their officer advanced courses during the year being considered. For most officers, this will be the third or fourth year of service.

Infantry branch fully supports this program and has a goal of providing 130 officers per year group to Special Forces. This will reduce the number of Infantry officers rebranched to combat support and combat service support branches under the current Force Alignment Plan and those to be detailed in the future under the Branch Detail Program.

Officers who consider serving in Special Forces must make that decision before or during their officer advanced courses. The schooling requirements, permanent change of station constraints, and professional development needs of both Infantry and Special Forces will not accommodate late branch transfers.

For additional information, call Special Forces Branch at AUTOVON 221-3169/8243, commercial (202) 325-3169/8243.

BOOK REVIEWS

The Pergamon-Brassey's publishing house has sent us a number of publications during the past few weeks we feel can benefit you in your professional reading program. Their titles are self-explanatory:

• ON GUARD FOR VICTORY: MILITARY DOCTRINE AND BALLISTIC MISSILE DEFENSE IN THE USSR. By Steven P. Adragna. 1987. 93 Pages. $9.95, Softbound.

• NATO'S MARITIME FLANKS: PROBLEMS AND PROSPECTS. By H. F. Zeiner-Gundersen, *et. al.* 1987. 124 Pages. $9.95, Softbound.

• M. V. FRUNZE: MILITARY THEORIST. By Colonel General Makhmut Gareev. Translated from the Russian edition. 1987. 402 Pages. $44.00.

• CLASH IN THE NORTH: POLAR SUMMITRY AND NATO'S NORTHERN FLANK. Edited by Walter Goldstein. 1987. 208 Pages. $24.00.

• THE FALL OF AFGHANISTAN: AN INSIDER'S ACCOUNT. By Abdul Samad Ghaus. 1987. 219 Pages. $25.00.

• WESTWARD WATCH: THE UNITED STATES AND THE CHANGING WESTERN PACIFIC. By Norman D. Palmer. 1987. 176 Pages. $14.95, Softbound.

• BRASSEY'S SOVIET AND COMMUNIST QUOTATIONS. Compiled and edited by Albert L. Weeks. 1987. 387 Pages. $50.00.

• CONTAINING THE SOVIET UNION: A CRITIQUE OF U.S. POLICY. Edited by Terry L. Deibel and John L. Gaddis. 1987. 251 Pages. $19.95.

• THE SUPERPOWERS IN CRISIS: IMPLICATIONS OF DOMESTIC DISCORD. By Richard J. Krickus. 1987. 236 Pages. $14.95, Softbound.

• FROM THE ATLANTIC TO THE URALS: NEGOTIATING ARMS CONTROL AT THE STOCKHOLM CONFERENCE. By John Borawski. 1987. 261 Pages. $30.00.

The Command and General Staff College's Combat Studies Institute has also sent us two of its most recent publications, both of which should prove of great interest to all infantrymen:

• STANDING FAST: GERMAN DEFENSIVE DOCTRINE ON THE RUSSIAN FRONT DURING WORLD WAR II: PREWAR TO MARCH 1943. By Major Timothy A. Wray. Research Survey Number 5. 1986. USGPO S/N 008-020-01118-5. $11.00. 221 Pages, Softbound. The author has done a fine job in culling both primary and secondary German sources to show the evolution of German defensive doctrine between 1917 and early 1943, and particularly how that doctrine was modified by the German experiences on the Eastern Front during the early years of World War II. He demonstrates that "certain basic principles remained constant throughout the war and formed the true heart of German doctrine" and that the "German Army's defensive methods were derived from four basic principles: depth, maneuver, firepower, and counterattack."

He discusses the influence Adolf Hitler exerted on the German Army's methods of fighting on the Eastern Front, and the continuing arguments between German infantry and armor commanders about the use of armor in defense. These arguments, he points out, became "heated because there was little possibility for compromise."

NOTE TO READERS: All of the books mentioned in this review section may be purchased directly from the publisher or from your nearest book dealer. We do not sell books. We will furnish a publisher's address on request.

Although the author touches only lightly on the German Army's use of its field artillery units, he gives full credit to the German infantry divisions that, after all, did much of the defensive fighting in Russia. He also attacks a few of the "myths" that have developed over the years about this massive conflict.

• A HISTORICAL PERSPECTIVE ON LIGHT INFANTRY. By Major Scott R. McMichael. Research Survey Number 6. 1987. 239 Pages, Softbound. In this study, the author addresses such questions as: What is the precise meaning of the term "light infantry"? How does light infantry differ from regular or conventional infantry? Are light infantry forces specialized elite forces or not? He concludes that "light infantry is, in fact, unique and distinct" and that "a light infantry ethic exists and manifests itself in a distinctive tactical style, in a special attitude toward the environment, in a freedom from dependence on fixed lines of communication, and in a strong propensity for self-reliance."

He does not feel that such specialized infantry organizations as Rangers, Commandos, and airborne units deserve to be considered light infantry because of "their costly, specialized training, privileged access to resources, and unusual capabilities."

He arrives at his conclusions by offering an analysis of the operations of four separate light infantry forces that were used during World War II or in the years immediately following that war — the Chindits in Burma in 1944; the Chinese Communist forces during the Korean War; the British operations in Malaya and Borneo from 1948 to 1966; and the World War II Canadian-American First Special Service Force.

Not everyone will agree with the author's conclusions, or with his choice of historical examples. But his study

does offer food for thought and should be consulted by those individuals in today's Army who are charged with developing light infantry doctrine.

Here are a number of our longer reviews:

JANE'S ARMOUR AND ARTILLERY, 1987-1988. Eighth Edition. Edited by Christopher F. Foss (Jane's, 1987. 1,062 Pages. $152.50).

This edition of a splendid reference series covers all armored fighting vehicles and crewed guns (both self-propelled and towed) in current service throughout the world, plus their armament and ammunition; their engines, transmissions, and powerpacks; and their deployment. It also has sections devoted to surface-to-air missiles and to multiple rocket launchers, while a six-page addenda section contains the latest information (correct to 1 September 1987) and photographs on certain of the items discussed in the book's main sections. The editor has added one new section for this edition—it is titled "armoured fighting vehicle families" and covers in some detail today's three main armored fighting vehicle families.

COMBAT LEADER'S FIELD GUIDE. 10th Edition, Revised and Updated. By James J. Gallagher (Stackpole Books, 1987. 271 Pages. $10.95). Reviewed by Captain Thomas M. Jordan, United States Army.

This handy little reference book, which has been designed to assist combat leaders in the field, is arranged in two parts—unit combat operations and soldier combat skills. It can be easily carried in a shirt pocket, and its total focus is on company level operations, individual skills, and field expedient techniques. Administrative data is not provided; this is a book on how to fight.

Although much of the unit combat operations portion is oriented on the Bradley-equipped mechanized infantry company, this does not detract from its usefulness for the light infantry soldier. The ideas discussed are conceptually applicable to all units.

In some cases, however, brevity is a disadvantage. The guide does touch briefly on the major tenets of AirLand Battle, rules of combat, and troop leading procedures. But because of its small unit focus, a somewhat wider theoretical perspective is needed. As a minimum, there should be some discussion of the fundamental principles of war, the combat imperatives, and the fundamentals of the offense and the defense.

The reader should not confuse the material in this publication with official Army doctrine. What we cannot find easily, however, is an official doctrinal publication that has such a variety of generally useful information in a condensed form suitable for use as a quick reference by a trained leader. Although it is somewhat expensive, I would recommend this book to all infantry company grade officers and noncommissioned officers.

THE KEY TO FAILURE: LAOS AND THE VIETNAM WAR. By Norman B. Hannah (Madison Books, 1987. 335 Pages. $19.95). Reviewed by Doctor Joe P. Dunn, Converse College.

Quite a debate continues over the nature of the Vietnam War. Was it primarily a revolutionary struggle for power between contending elements in South Vietnam or should it have been perceived as a conventional external aggression by North Vietnam? The correct strategy to be employed—counterinsurgency or conventional mid-intensity warfare—should have followed from the definition of the primary threat.

Retired foreign service officer Norman Hannah clearly asserts that the war was the latter, and that our strategy was tragically wrong. In particular, he finds "the key to failure" in our inability to stop Hanoi's infiltration down the Ho Chi Minh Trail. He contends that this could not have been accomplished by bombing and agrees with Colonel Harry Summers (who wrote the book's foreword) that it called for ground action across the Laotian panhandle at an early stage in the conflict.

Hannah explains that this was not done at any point during the war because the U.S. compartmentalized the war into three Indochina theaters and employed an incremental approach rather than an overall grand strategy. The Kennedy administration and its successors believed they had shelved the Laotian problem with the Geneva Accords of 1962, which neutralized the area, and then by the 1963 "tacit agreement," which ignored Hanoi's violations of the earlier agreement in return for the North Vietnamese not taking over the northern part of the country. Thus, the feeble efforts by the U.S. to deal with the Ho Chi Minh Trail problem throughout the war paved the way for eventual victory by the North Vietnamese.

Hannah's book reminds me very much of Richard Nixon's *No More Vietnams* (1985). Both works are provocative, make valid points, and offer necessary correctives to much of conventional wisdom. But both are too simplistic, sanctimonious, and unduly judgmental. They reduce complex matters to morality plays of good guys and knaves or fools. Both proclaim rather than prove their case.

Hannah directs our thinking to important questions, but the volume affords insufficient answers. Despite its slow and repetitive development, the ideas that the book raises are well worth serious contemplation.

THE SEEDS OF DISASTER: THE DEVELOPMENT OF FRENCH ARMY DOCTRINE, 1919-1939. By Robert Allan Doughty (Archon Books, 1985. 232 Pages. $27.50). Reviewed by Doctor Charles E. White, USAIS Historian.

"Thank God for the French Army," Winston Churchill said when Adolf Hitler assumed power in Germany.

But in 1933 the French Army was no longer the superlative weapon it had once been. And in one of the finest analyses of French interwar doctrine, Robert Doughty has written an excellent study of an army that formulated a doctrine, devised a strategy,

organized and equipped its units, and trained its soldiers to fight the wrong kind of war.

He shows that French military thinking between the world wars became wholly defensive in nature, ignoring Napoleon's maxim that the side that stays within its fortifications is beaten. Significantly, the French had helped introduce the tank and the airplane, but now did little to extend their use.

From 1919 to 1939 French military manuals devoted page after page to the methodical, set-piece battle of World War I. Because of France's great loss of life in that war, French military thinking spurned any notion of taking the offensive. Ironically, the Maginot Line actually protected Germany better than it did France. Paralyzed by its past, the French Army in 1940 simply could not react in time to the imaginative, daring, and well-designed German plan.

It would be a great mistake, though, to think that the *Wehrmacht* was solely responsible for its stunning victory in 1940. As Doughty clearly demonstrates, France defeated herself, and this is why his book is so instructive for both soldiers and civilians. France was a victim of her own historical experience, her geography, and her political and military institutions.

DEATH VALLEY: THE SUMMER OFFENSIVE, I CORPS, AUGUST 1969. By Keith W. Nolan (Presidio, 1987. 316 Pages. $17.95).

INTO LAOS: THE STORY OF DEWEY CANYON II/LAM SON 719, VIETNAM 1971. By Keith W. Nolan (Presidio Press, 1987. 387 Pages. $18.95). Both books reviewed by Doctor Mike Fisher, Kansas State University.

With these two books, Keith Nolan brings full circle the historical trilogy he began with his 1983 monograph, the BATTLE FOR HUE. In all three works, Nolan, a 24-year old Missourian, emphasizes the role of the foot soldier in the Vietnam War and reconstructs the ebb and flow of battle from a combination of personal interviews with survivors and after action reports of the units involved.

Nolan has successfully developed his central theme—the American soldier in Vietnam performed with courage and skill when he was properly led. As individual and collective enthusiasm for the war eroded, though, especially in the conflict's later years, the infantryman often fought with a resolve and fatalism that contrasted sharply with our country's seeming lack of national purpose.

DEATH VALLEY chronicles the savage fighting between two U.S. regiments—one Army, one Marine—and a well trained, heavily armed enemy force. During the summer of 1969, President Nixon announced the coming phase-out of U.S. involvement in Vietnam. DEATH VALLEY was the first major engagement by U.S. ground forces following that announcement.

Nolan explores in detail the problems of battlefield discipline, drug abuse, and racial tension that severely affected many U.S. units in Vietnam at this time. He also contrasts the performance of the 7th Marine Regiment with that of the Army's 196th Infantry Brigade. The reader tracks the two regiments into the foreboding gloom of Hiep Duc, or "Death" valley, a mountainous, heavily jungled area southwest of DaNang. Problems with race, drugs, and discipline disappeared as the two units fought for survival.

INTO LAOS takes the reader into the perhaps reluctant and last major U.S. ground offensive of the war, Dewey Canyon II. Simply, the plan called for U.S. infantry units to secure the ground east from the storied Marine base at Khe Sahn while South Vietnamese Army (ARVN) units would leapfrog into Laos along this secured route, setting up a series of support bases and interdicting the Ho Chi Minh Trail.

What followed the initiation of the plan in the spring of 1971 dominated television screens in the U.S. as Lam Son 719 ended. Americans at home gaped as they watched U.S. helicopters bringing in the survivors of the operation, many ARVN soldiers hanging to the skids in a desperate effort to escape the North Vietnamese. Unreported by a then often biased media were the terrible casualties suffered by the enemy forces— nearly 20,000 dead—and the fact that the last U.S./ARVN ground operation had been more success than failure.

Current military leaders can benefit from Nolan's ability to record and analyze complex operations from eye level, recreating battles from the forward outpost lines back to the infantrymen who were most intensely involved. The military funnel, after all, that emptied nearly one million Americans into Vietnam between 1965 and 1972 placed only a small number at the cutting edge in the Army infantry and Marine rifle companies.

Those men and their story consume Nolan, and a careful reading of his books can profit those who one day may lead similar men and units into combat.

GREEN BERETS, SEALS, AND SPETSNAZ: U.S. AND SOVIET SPECIAL MILITARY OPERATIONS. By John M. Collins (Pergamon-Brassey's, 1987. 174 Pages. $15.95, Softbound). Reviewed by Leroy Thompson, Manchester, Missouri.

Originally commissioned by the U.S. House Armed Services Committee, this work was intended to be a general overview of the special operations capabilities of the U.S. and the Soviet Union.

It does this quite well, considering that the author compiled his information from unclassified sources and intended his book for broad circulation. In particular, it is quite useful as a vehicle to acquaint those who are unfamiliar with special operations with the various missions and methods involved in this type of warfare. It would do the author a disservice, though, to imply that even those readers with special operations experience and knowledge will not find some value in his book.

The various charts that illustrate, for example, special forces (in the generic sense) missions and organization should be of interest even to specialists.

The glossary should also be of use to those with all levels of special operations background since it offers a standard working definition of terms not often included in military dictionaries. Almost a third of the book consists of source notes and an index, thus making it most useful to the scholar as well.

I recommend this book most highly to readers who are not specialists in unconventional warfare, as well as to those who have special operations backgrounds. It offers a primer on what is available in unclassified documents and, therefore, what can be discussed in articles or interviews without the bother of possibly compromising self or security.

CONVENTIONAL DEFENSE AND TOTAL DETERRENCE: ASSESSING NATO'S STRATEGIC OPTIONS. By Robert B. Killebrew (Scholarly Resources, 1986. 159 Pages. $24.95). Reviewed by Colonel James B. Motley, U.S. Army, Retired.

The thesis of this book is that "the conventional defense of Europe is achieveable today, or in the near future, provided NATO is willing to think through the consequences; modify national and Alliance strategies; and accept a slightly higher, but not unacceptable, degree of near-term risk."

Aside from the "purely military questions of resources, operations, and assets," the author (a serving Army lieutenant colonel when he wrote this book) writes that the difficulties of coming to grips with NATO's conventional defense within the existing framework of political and military realities revolve around three issues. First is NATO's political sensitivity to any apparent weakening of nuclear deterrence. Second is the difficulty of arriving at a consensus on the nature of the threat. And third is the difficulty of "building a box," or of defining the objectives and restraints of a strategy of conventional defense for the Alliance.

Arguing that the continued defense of NATO and deterrence of a war in Europe are vital to U.S. national security, Killebrew feels that if NATO can get a clear view of the objectives and can make maximum use of the forces it has available, the Alliance appears to have sufficient conventional forces on hand to blunt an initial Soviet attack. He further contends that nonnuclear defense means a whole new relationship between Western arms and strategy and the Alliance's policies.

Drawing heavily from many of the standard works, the author has written an informative book that will appeal to the defense specialist. Maps, tables, diagrams, chapter endnotes, and a six-page selected bibliography complement a well-written book.

RECENT AND RECOMMENDED

THE DESTRUCTION OF CONVOY PQ-17. By David Irving. A revised and updated version of the 1968 edition. Richardson and Steirman, 1988. 415 Pages. $19.95.

MODERN MILITARY HELICOPTERS. By Paul Beaver. Sterling, 1987. 168 Pages. $7.95, Softbound.

U.S. ARMY RANGERS AND LRRP UNITS, 1942-87. By Gordon L. Rottman. Color Plates by Ron Volstad. Osprey Elite Series Number 13. Osprey, 1987. 64 Pages, Softbound.

THE AMBIGUOUS RELATIONSHIP: THEODORE ROOSEVELT AND ALFRED THAYER MAHAN. By Richard W. Turk. Greenwood, 1987. 183 Pages. $32.95.

THE DARK SUMMER: AN INTIMATE HISTORY OF THE EVENTS THAT LED TO WORLD WAR II. By Gene Smith. Macmillan, 1987. 314 Pages. $22.50.

SIEGE: MALTA, 1940-1943. By Ernle Bradford. William Morrow, 1986. 304 Pages. $19.95.

FROM THE BARREL OF A GUN: ARMIES AND REVOLUTIONS. By Anthony James Joes. Pergamon-Brassey's, 1986. 225 Pages. $14.95, Softbound.

ARMS CONTROL VERIFICATION: THE TECHNOLOGIES THAT MAKE IT POSSIBLE. Edited by Kosta Tsipis, David W. Hafemeister, and Penny Janeway. Pergamon-Brassey's, 1986. 419 Pages. $34.95.

THE SOCIAL HISTORY OF THE MACHINEGUN. By John Ellis. With a new Foreword and Bibliographical Essay by Edward C. Ezell. Originally published in 1975. The Johns-Hopkins University Press, 1986. 192 Pages. $8.95, Softbound.

THE PARAS. By Frank Hilton. Presidio, 1986. 248 Pages.

HELL ON WHEELS: THE 2d ARMORED DIVISION. By Donald E. Houston. A reprint of the 1977 edition. Presidio, 1986. 466 Pages. $12.95, Softbound.

THE LONGEST BATTLE: THE WAR AT SEA, 1939-1945. By Richard Hough. William Morrow, 1987. 371 Pages. $19.95.

THE INTELLIGENT LAYPERSON'S GUIDE TO "STAR WARS": 16 QUESTIONS AND ANSWERS ON STRATEGIC DEFENSE AND SPACE WEAPONRY. By Joyce E. Larson and William C. Bodie. National Strategy Information Center, 1986. 59 Pages. $6.95, Softbound.

MILSPEAK: A DICTIONARY OF INTERNATIONAL MILITARY ACRONYMS AND ABBREVIATIONS. Compiled by Andy Lightbody and Joe Poyer. North Cape Publications, 1986. 91 Pages. $5.95, Softbound.

REBEL: THE LIFE AND TIMES OF JOHN SINGLETON MOSBY. By Kevin H. Siepel. A reprint of the 1983 edition. St. Martin's Press, 1988. 346 Pages. $8.95, Softbound.

U.S. MARINES IN LEBANON, 1982-1984. By Benis M. Frank. USMC History and Museums Division, 1987. 196 Pages.

DRAGONS AT WAR: 2-34th INFANTRY IN THE MOJAVE. By Daniel P. Bolger. Presidio Press, 1987. 338 Pages. $18.95.

THE BOMBERS: THE ILLUSTRATED STORY OF OFFENSIVE STRATEGY AND TACTICS IN THE 20th CENTURY. By Robin Cross. Macmillan, 1987. 224 Pages. $22.95.

THE ORDNANCE SURVEY COMPLETE GUIDE TO THE BATTLEFIELDS OF BRITAIN. By David Smurthwaite. First published in hard cover in Great Britain in 1984. Viking Penguin, 1987. 224 Pages. $14.95, Softbound.

SAUDI ARABIA IN THE OIL ERA: REGIME AND ELITES, CONFLICT AND RESOLUTION. By Mordechai Abir. Westview Press, 1988. 247 Pages. $38.50.

ARMS CONTROL AND NUCLEAR WEAPONS: U.S. POLICIES AND THE NATIONAL INTEREST. Edited by W. Gary Nichols and Milton L. Boykin. Contributions in Military Studies Number 59. Greenwood Press, 1987. 135 Pages. $29.95.

PERSPECTIVES ON NUCLEAR WAR AND PEACE EDUCATION. Edited by Robert Ehrlich. Contributions in Military Studies Number 60. Greenwood Press, 1987. 242 Pages. $37.95.

CAST-OFF YOUTH: POLICY AND TRAINING METHODS FROM THE MILITARY EXPERIENCE. By Thomas G. Sticht, *et. al.* Praeger, 1987. 216 Pages. $39.95.

THE DICTIONARY OF SDI. By Harry Waldman. Scholarly Resources, 1988. 182 Pages. $35.00.

A CODE TO KEEP. By Ernest Brace. St. Martin's Press, 1988. 264 Pages. $16.95.

THE BRITISH ARMY ON CAMPAIGN, 1816-1902 (2): THE CRIMEA, 1854-1856. By Michael Barthorp. Color Plates by Pierre Turner. Men-at-Arms Series Number 196. Osprey, 1987. 48 Pages, Softbound.

PRUSSIAN RESERVE, MILITIA, AND IRREGULAR TROOPS, 1806-1815. By Peter Hofschroer. Color Plates by Bryan Fosten. Men-at-Arms Series Number 192. Osprey, 1987. 48 Pages, Softbound.

POLISH ARMIES, 1569-1696 (2). By Richard Brzezinski. Color Plates by Angus McBride. Men-at-Arms Series Number 188. Osprey, 1987. 48 Pages, Softbound.

KOREA: THE WAR BEFORE VIETNAM. By Callum A. MacDonald. The Free Press, 1987. 320 Pages. $24.95.

FROM OSS TO GREEN BERETS. By Colonel Aaron Bank. Originally published in 1986. Pocket Books, 1987. 236 Pages. $3.95, Softbound.

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From The Editor

WRITING FOR PUBLICATION

Two questions we hear quite frequently are: What is your audience? Where do you get your material?

Our target audience is described quite clearly in our charter—it is the members of the Infantry battalion, especially the company grade officers and the noncommissioned officers.

To serve that audience, we like to receive articles that deal with contemporary tactics, training programs and techniques, weapons, and doctrine. And we like short "tips" on training, maintenance, administration, leadership, and other professional subjects. We also include relevant historical articles (those that offer lessons for today's Infantrymen), career notes, book reviews, and letters to the editor.

More than 95 percent of our articles arrive unsolicited by mail, or are submitted directly to us by personnel assigned at Fort Benning. We feel that most of the articles we accept for publication are those most likely to appeal to the members of our audience. We do not feel we publish many "shorts" or "overs."

We would like to see more input from our enlisted readers. Whether you are a PFC or a CSM, you probably have an idea or an experience that should be shared with your fellow Infantrymen. Articles on *your* ideas of good leadership, best use of equipment and weapons, ways a soldier can improve himself professionally, and other aspects of Infantry soldiering will be given our utmost editorial consideration.

None of this is meant to discourage our commissioned officer and civilian contributors. You have been the substance of our publication for a long time, and we will always need, and will always happily receive your articles.

We emphatically stress the point that we are seeking ideas and information, not impressive writing skills. No submission is rejected solely on the basis of bad spelling or unique syntax.

Naturally, we cannot promise to publish everything we receive, but we do promise thorough consideration. If you have doubts about the worth of your ideas, write to us (or call us) and give us a brief description of the article you have in mind. We'll let you know whether we consider such an article worth pursuing.

But this is your bulletin, and if you have a comment or suggestion about its contents, let us hear it. And please don't hesitate to tell us what you think about the job we are doing, or how you think we might do it better.

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